April 1974 Number 356-Part II

Solar-Geophysical Data comprehensive reports

Data for October 1973–September 1973
& Miscellanea

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Solar - Geophysical Data

NO. 356 APRIL 1974

Part II (Comprehensive Reports)

DATA FOR
OCTOBER 1973
SEPTEMBER 1973
& MISCELLANEA

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

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SOLAR - GEOPHYSICAL DATA

No. 356

Issued in two parts

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Solar - Terrestrial Data Services Division

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

SOLAR FLARES
Confirmed
OCTOBER 1973

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS					REMARKS
	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MONATH PLAGE REGION	CMP / DAY	MIN.				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	MAX. INT. %	
820 MITK	01	0400	0416	0409	S17	E25	.563	12542	3.0	16	1F		C	0409	3.40	4.10			E 3
GRP49821	01	0642	0704	0648	N08	W66	.909	12532	26.3	22	-N				1.06				4 4 3 5
TACH	01	0640	0656	0643	N06	W67	.917	12532	26.3	16	-B		C	0643	1.00			80	EZ
MITK	01	0640E	0708	0653	N10	W66	.908	12532	26.3	28C	1N		C	0653	1.55				E
CRON	01	0643E	0705		N08	W65	.902	12532	26.4	22D	-N		V		.62				
ISTA	01	0645	0705		N07	W67	.917	12532	26.3	20	-N								D
GRP49823	01	0950	0959	0952	N11	W68	.922	12535	26.3	9	--N				.37				2 2 2 5
MONT	01	0949	0959	0951	N12	W67	.915	12535	26.4	10	-N		C	0951	.21				D
CANR	01	0950	0958	0953	N10	W69	.929	12535	26.2	8	-N		V	0953	.52				
GRP49825	01	1015	1028	1019	S07	E12	.313	12542	2.3	13	--N				.27				3 3 3 4
CATA	01	1015	1025	1020	S07	E12	.313	12542	2.3	10	-N	1		1020	.29	.30		(150)	
CANR	01	1015	1030	1018	S07	E10	.292	12542	2.2	15	-N		V	1018	.41				
MONT	01	1016	1020D	1019D	S06	E13	.312	12542	2.4	4D	-N		C	1019	.10				D
826 HUAN	01	1306	1313	1308	N11	W68	.922	12535	26.4	7	--N	1	C	1308	.26				3
827 HUAN	01	1425	1429	1425	S11	E17	.415	12542	2.9	4	--F	2	C	1425	.21	.22			D 3
GRP49828	01	1426	1443	1429	S14	W06	.368	12540	1.2	17	--F				.75				3 3 3 4
RAMY	01	1423	1438	1428	S14	W06	.368	12540	1.1	15	-F	2	C		.28				DE
HUAN	01	1427	1435	1429	S14	W06	.368	12540	1.2	8	-N	1	C	1429	.41	.44			
CANR	01	1427E	1455		S14	W06	.368	12540	1.2	28D	-F		V		1.55				
GRP49829	01	1803	1819	1807	S14	W08	.378	12540	1.2	16	--N				.51				2 2 2 2
PALE	01	1803	1819	1807	S13	W08	.363	12540	1.2	16	-N	3	C		.55				F H
HUAN	01	1808E	1810D		S15	W07	.386	12540	1.2	2D	-N	2	C	1809	.46	.50			C
	01	1918	1936	NO FLARE PATROL															
	01	2007	2030	NO FLARE PATROL															
	01	2119	2147	NO FLARE PATROL															
GRP49830	02	0015	0046	0018	S09	W12	.337	12540	1.1	31	--F				1.27				2 1 1 2
PALE	02	0015E	0044	0018U	S13	W12	.391	12540	1.1	29D	-F	2	C		1.27				U
CRON	02	0040	0048		S04	W12	.276	12540	1.1	8	-F		V		1.03				
831 CRON	02	0158E	0212		S04	W12	.276	12540	1.2	14D	--F		V		1.13				2
GRP49833	02	0259	0314	0303	N22	W19	.405	12537	30.7	15	--B				.54				2 2 2 5
CRON	02	0259	0313	0302	N22	W18	.393	12537	30.8	14	-B		V		.62				
PALE	02	0304E	0315	0304U	N22	W19	.405	12537	30.7	11D	-N	2	C		.45				F
834 MITK	02	0405	0436	0421	S13	E07	.356	12542	2.7	31	--F		C	0421	.83	.90			E 3
836 ARCE	02	0911E	0920D		N23	W21	.438	12537	30.9	9D	--N		C	0915	.25	.30			4
	02	1000	1005	NO FLARE PATROL															
	02	1203	1240	NO FLARE PATROL															
GRP49837	02	1220	1242	1226	S14	E03	.357	12542	2.7	22	-B				.72				2 2 1 2
CANR	02	1220	1230D	1224U	S15	E01	.370	12542	2.6	10D	1N		V	1224		2.80			
RAMY	02	1225E	1242D	1228	S13	E05	.347	12542	2.9	17D	-B	3	V		.72				DE
GRP49838	02	1909	1924	1916	N22	W28	.516	12537	30.7	15	--N				.37				2 2 2 4
PALE	02	1909	1924	1916	N22	W28	.516	12537	30.7	15	-N	2	C		.36				H
RAMY	02	1915E	1920C	1915U	N21	W28	.510	12537	30.7	5C	-N	3	C		.37				DE H
GRP49839	02	2017	2023	2019	N11	W79	.978	12535	26.9	6	--F				.32				2 2 2 2
RAMY	02	2016E	2025C	2018U	N11	W80	.981	12535	26.8	9C	-N	2	C		.37				DE
HUAN	02	2017	2021	2019	N11	W78	.974	12535	27.0	4	-F	1	C	2019	.26				D
	02	2030	2034	NO FLARE PATROL															
	02	2153	2210	NO FLARE PATROL															
840 CRON	03	0001E	0023	0003	S14	W26	.545	12540	1.1	22D	--N		V		.83				1
841 CRON	03	0112E	0158	0146	N13	W83	.990	12535	26.8	46D	-N		V		.62				1
842 CRON	03	0358E	0416	0403	N13	W83	.990	12535	26.9	18D	-N		V		.62				2
GRP49845	03	1435	1459	1439	S13	W11	.382	12542	2.8	24	--F				1.83				2 2 2 3
RAMY	03	1435	1459	1439	S13	W12	.390	12542	2.7	24	-F	4	C		.56				DE
WEND	03	1438E	1452D		S13	W09	.368	12542	2.9	14D	1F		V		3.09				

SOLAR FLARES
Confirmed

OCTOBER 1973

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP / DAY	MIN.		CONO.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH HG	MAX. INT. %	
GRP49846	03	1701	1734	1709	S14	W12	.404	12542	2.8	33	--F				.46				2 2 2 2
RAMY	03	1701	1734	1709	S13	W14	.408	12542	2.7	33	-F	4	C		.56				DE
HUAN	03	1704E	17040		S14	W09	.382	12542	3.0		-F	1	P	1704	.36	.39			
GRP49847	03	2031	2103	2038	N18	E09	.248	12543	4.5	32	-N				1.37				2 2 2 2
RAMY	03	2031E	20460	2035U	N18	E09	.248	12543	4.5	150	-N	2	C		1.39				U S
PALE	03	2032E	2103	2041U	N17	E08	.225	12543	4.5	310	-N	2	C		1.34				U F
	03	2125	2148	NO FLARE PATROL															
	03	2154	2155	NO FLARE PATROL															
	03	2201	2210	NO FLARE PATROL															
848 PALE	04	0218E	0223	0219U	N17	W02	.184	12543	3.9	50	--F	1	C		.27				H 3
GRP49849	04	0810	0827	0815	S14	W21	.489	12542	2.9	17	-N				.90				5 5 5 7
CANR	04	0809	08120	0812	S14	W21	.489	12542	2.8	30	-F		V	0812	1.55	1.60			F
ATHN	04	0809	0827	0813	S15	W22	.510	12542	2.7	18	-N	3	C		.83				
ARCE	04	0810E	08260		S14	W22	.500	12542	2.7	160	-N		C	0813	.47	.50			E
MONT	04	0810	0828	0813	S14	W21	.489	12542	2.8	18	-N		C	0813	.72				F
TEHR	04	0820E	0827	0820U	S13	W20	.468	12542	2.8	70	-N	2	C		.91				
GRP49850	04	0818	0829	0821	S13	W43	.731	12540	1.1	11	--F				.36				3 3 3 7
ATHN	04	0814	0827	0816	S14	W40	.704	12540	1.3	13	-F	3	V		.50				F
TEHR	04	0820E	0827	0822	S11	W44	.734	12540	1.0	70	-F	1	C		.37				F
MONT	04	0821	0833	0824	S14	W44	.746	12540	1.0	12	-N		C	0824	.21				
7 STATIONS REPORTING GROUP 49853. 2 STATIONS OBSERVING AND NOT REPORTING.																			
GRP49853	04	1032	1220	1040	S14	W44	.746	12540	1.1	108	-N				1.21				5 5 5 8
MONT	04	1031	10540	1043	S14	W44	.746	12540	1.1	230	-N		C	1043	.41				D
MEUD	04	1031	1230	1041	S15	W43	.740	12540	1.2	119	1N		C	1132	2.58	3.80			EHU
KHAR	04	1032E	1123D		S16	W46	.775	12540	1.0	510	1F		C	1033	2.27	3.50			E
TEHR	04	1033E	1038	1033U	S11	W44	.734	12540	1.1	50	-N	3	V		.25				DE
RAMY	04	1033	12100	1042	S15	W43	.740	12540	1.2	970	-N	3	C		.56				UDE
49853	04	1112	1221	1143	S13	W45	.752	12540	1.1	69	*1N				1.94				2 2 2 6
TEHR	04	1108E	1202	1145	S11	W44	.734	12540	1.2	540	1N	3	V		2.15				F
CATA	04	1115	1240	1140	S15	W45	.761	12540	1.1	85	1N	3		1140	1.73	2.67		(195D	
49853	04	1031	1230	1132	S15	W43	.740	12540	1.2	119	*1N				2.58				2 1 1 6
MEUD	04	1031	1230	1132	S15	W43	.740	12540	1.2	119	1N		C	1132	2.58	3.80			EHU
RAMY	04	1033	12100	1050	S15	W43	.740	12540	1.2	970	-N	3	C		.74				UDE
49853	04	1108	1202	1114	S11	W44	.734	12540	1.2	54	*-N				.83				2 1 1 7
TEHR	04	1108E	1202	1114	S11	W44	.734	12540	1.2	540	-N	3	V		.93				F
CANR	04	1158	12000		S14	W43	.726	12540	1.3	20	1N		V	1200	2.06	2.80			
GRP49854	04	1325	1333	1327	S16	W18	.481	12542	3.2	5	--F				.33				2 2 1 7
ATHN	04	1324	1335	1326	S16	W19	.491	12542	3.1	11	-N	4	C		.33				DE H
HUAN	04	1326	1330	1327	S15	W16	.451	12542	3.4	4	-F	1	C	1327					
GRP49856	04	1452	1530	1510	S14	W22	.500	12542	3.0	38	-N				1.44				2 2 2 3
CANR	04	1452	15090	1509	S14	W16	.438	12542	3.4	170	1N		V		2.58				
CATA	04	1510E	1530	1510	S14	W28	.568	12542	2.5	200	-N	3		1510	.29	.35		(195D	
857 PALE	04	1820	1827	1822	S13	W22	.490	12542	3.1	7	--F	3	C		.27				F H 1
858 PALE	04	1847	1852	1849	S13	W46	.763	12540	1.3	5	--F	3	C		.27				1
859 PALE	04	1903	1912	1905	S13	W23	.501	12542	3.1	9	--N	3	C		.19				1
GRP49860	04	2227	2256	2230	S15	W25	.543	12542	3.1	29	-N				1.45				2 2 2 2
MANI	04	2227E	22420	2229	S16	W23	.531	12542	3.2	150	-N	1		2229	1.34	1.60			HF
PALE	04	2228E	2256	2230U	S14	W26	.545	12542	3.0	280	-N	3	V		1.55				DE
GRP49861	04	2347	0013	2354	S13	W31	.595	12542	2.7	26	-B				1.16				2 2 2 3
CRCN	04	2347E	0011	2349	S13	W31	.595	12542	2.7	240	-N		V		1.13				
PALE	04	2352E	0014	2359	S12	W31	.588	12542	2.7	220	-B	3	C		1.18				DE
GRP49862	05	0225	0240	0228	S16	W27	.573	12542	3.1	15	--F				.60				2 2 2 5
MANI	05	0224	0241	0227	S17	W27	.582	12542	3.1	17	-F	2		0227	.83	1.00			HF
PALE	05	0226	0239	0228	S14	W27	.556	12542	3.1	13	-F	2	C		.36				
3 STATIONS REPORTING GROUP 49863. 1 STATIONS OBSERVING AND NOT REPORTING.																			
GRP49863	05	0248	0408	0339	S13	W55	.845	12540	1.0	80	-N				1.29				3 3 3 4
MANI	05	0245	03510	0341	S14	W58	.875	12540	30.8	660	-N	2		0341	.62	1.15			
PALE	05	0252	0355	0337	S13	W55	.848	12540	1.0	63	-N	2	C		1.08				F
CRCN	05	0335	0421		S13	W53	.831	12540	1.2	46	1F		V		2.17				

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	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
49863	05	0252	0355	0258	S15	W53	.836	12540	1.1	63	*-F				.85				2 2 2 4
PALE	05	0252	0355	0257	S13	W55	.848	12540	1.0	63	-F	2	C		1.18				F
MANI	05	0255E	03190	0259U	S16	W51	.822	12540	1.3	240	-F	2		0259	.52	.88			F
GRP49866	05	0944	0949	0945	S16	W31	.617	12542	3.1	5	--N				.36				4 4 4 7
MEUO	05	0943	0949		S17	W31	.624	12542	3.1	6	-F		C	0943	.41	.50			
MCNT	05	0943	0949	0944	S15	W31	.609	12542	3.1	6	-N		C	0944	.41				D
ARCE	05	0945E	0948D		S16	W30	.606	12542	3.2	3D	-N		P	0945	.32	.40			
CATA	05	0945	0950	0945	S16	W31	.617	12542	3.1	5	-N	3		0945	.29	.36		(166)	
GRP49868	05	1118	1125	1120	S17	W35	.667	12542	2.9	7	-N				1.45				4 4 4 7
RAMY	05	1116	1128	1119	S16	W36	.671	12542	2.8	12	-F	3	C		.37				DE
MONT	05	1117	1123	1120	S17	W35	.667	12542	2.8	6	-N		C	1120	1.86				
MEUO	05	1117	1123	1120	S18	W35	.674	12542	2.9	6	-N		C	1120	1.24	1.60			EL
CATA	05	1120	1125	1120	S17	W35	.667	12542	2.9	5	1N	3		1120	2.31	3.11		(170)	
GRP49870	05	1356	1416	1401	S16	W38	.693	12542	2.7	20	--F				.40				4 4 3 5
RAMY	05	1355	1415	1401	S16	W38	.693	12542	2.7	20	-F	2	C		.37				DE
MEUO	05	1355	1412	1400	S16	W38	.693	12542	2.7	17	-N		C	1400	.52	.70			E
MCMA	05	1356	1420	1401	S15	W39	.698	12542	2.7	24	-F		C	1401	.31	.40			DH
HUAN	05	1358	1400D		S15	W38	.687	12542	2.7	2D	-F	1	P	1359					
GRP49871	05	1928	1957	1940	S15	W42	.730	12542	2.7	29	--F				.70				2 2 2 2
PALE	05	1920	1956	1935	S14	W44	.746	12542	2.5	36	-N	2	C		.99				DE
PALE	05	1920	1956	1927	S14	W44	.746	12542	2.5	36	-N	2	C		.36				DE
MCMA	05	1936	1958	1944	S15	W40	.709	12542	2.9	22	-F		C	1944	.41	.60			E
GRP49872	05	1937	2039	1947	S12	W59	.879	12540	1.4	62	--F				.67				3 2 2 3
PALE	05	1935	2052D	1946	S12	W57	.863	12540	1.5	77D	-F	2	C		1.08				F
MCMA	05	1938	2025	1947	S12	W60	.887	12540	1.3	47	-F		C	1947	.26	.50			D
RAMY	05	2004E	2013D	2007	S13	W59	.881	12540	1.4	9D	-F	3	C		.83				DE
873 PALE	05	2211E	2214D	2212U	N05	E36	.586	12549	8.6	3D	--F	2	V		.26				2
GRP49874	06	0136	0210	0146	S14	W45	.756	12542	2.7	34	-N				1.16				3 3 3 4
PALE	06	0136	0215D	0150U	S15	W45	.760	12542	2.7	39D	-N	2	C		1.44				F
VORO	06	0136	0204	0141	S13	W46	.762	12542	2.6	28	-B		C	0148	1.02	1.50		64	EJ
MANI	06	0140E	0152D	0147	S13	W43	.731	12542	2.8	12D	-N	1		0147	1.03	1.52			F
3 STATIONS REPORTING GROUP 49875. 1 STATIONS OBSERVING AND NOT REPORTING.																			
GRP49875	06	0254	0446	0257	S15	W49	.800	12542	2.4	112	-F				1.45				2 2 2 4
TEHR	06	0254E	0447	0254U	S16	W51	.822	12542	2.3	113D	-N	1	V		.83				F
CROM	06	0300E	0445	0300	S14	W46	.766	12542	2.7	105D	1F		V		2.06				
	06	0255	0300	NO FLARE PATROL															
49875	06	0312	0457	0341	S17	W46	.779	12542	2.7	105	*1N				2.19				2 1 1 4
TEHR	06	0312E	0457	0341U	S17	W46	.779	12542	2.7	105D	1N	3	C		2.19				U F
KODA	06	0353	0436	0355	S15	W45	.760	12542	2.8	43	-2		P	0412	.99	1.02	2.08		CE
GRP49875	06	1049	1127	1056	S16	W68	.945	12540	1.4	38	-N				.53				3 3 3 7
RAMY	06	1046E	1126	1050	S14	W67	.937	12540	1.4	40D	-N	4	V		.66				DE
TEHR	06	1052	1128	1102	S17	W69	.952	12540	1.3	36	-N	3	C		.36				
CATA	06	1055E	1100D	1055	S16	W68	.945	12540	1.4	5D	-N	3		1055	.58			(174)	
877 RAMY	06	1600	1609	1603	S17	W53	.842	12542	2.7	9	--F	4	V		.28				DE 2
	06	1806	1823	NO FLARE PATROL															
	06	1826	1849	NO FLARE PATROL															
	06	1941	2053	NO FLARE PATROL															
	06	2107	2140	NO FLARE PATROL															
	07	1752	1812	NO FLARE PATROL															
	07	1848	1857	NO FLARE PATROL															
	07	1900	1908	NO FLARE PATROL															
	07	1909	1935	NO FLARE PATROL															
	07	1941	2006	NO FLARE PATROL															
	07	2019	2058	NO FLARE PATROL															
880 PALE	07	2058E	2108		S16	W67	.940	12542	2.9	10D	--F	1	C						F 1

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	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hd	MAX. INT. %	
	07	2108	2205	NO FLARE PATROL															
GRP49881	07	2322	2335	2325	N14	W64	.893	12543	3.2	13	-N				.47				3 3 3 3
VORO	07	2322	2333	2324	N14	W65	.901	12543	3.1	11	-B		C	2324	.65	1.40		72	DJ
PALE	07	2323E	2336	2326	N15	W63	.885	12543	3.2	13D	-N	2	C		.36				F
CRON	07	2325E	2336		N14	W63	.885	12543	3.3	11D	-N		V		.41				
882 CRON	08	0231E	0255		S15	W64	.920	12542	3.3	24D	1N		V		1.55				2
GRP49883	08	1212	1230	1216	N13	W72	.946	12543	3.1	18	--F				.33				4 4 3 4
ISTA	08	1210	1230	1215	N12	W70	.935	12543	3.3	20	-N								E
RAMY	08	1211	1232	1215	N13	W72	.946	12543	3.1	21	-N	3	C		.28				DE
CATA	08	1215	1220D	1215	N14	W74	.956	12543	3.0	5D	-F	1		1215	.29			(135)	
CANR	08	1218E	1228	1220	N13	W72	.946	12543	3.1	10D	-F		V	1220	.41	1.00			
884 RAMY	08	1528	1550	1538	S10	W55	.840	12545	4.5	22	--F	3	C		.19				DE 3
	08	1952	2032	NO FLARE PATROL															
	08	2051	2248	NO FLARE PATROL															
GRP49896	09	0720	0854	0846	S09	W61	.889	12545	4.7	94	--F				.10				4 2 1 9
ISTA	09	0720E	0854		S09	W60	.881	12545	4.8	94D	-F								D
ABST	09	0803E	0807D	0805	S08	W62	.895	12545	4.7	4D	-F		P	0805	.90	1.80		62	DJ
CATA	09	0820E	0845D	0825	S12	W61	.894	12545	4.9	25D	-N	3		0825	.29	.64		(186)	
MCNT	09	0843E	0853D	0846	S09	W62	.896	12545	4.7	10D	-N		C	0846	.10				D
GRP49887	09	1005	1031	1005	S10	W63	.905	12545	4.7	26	--N				.15				2 2 2 6
MONT	09	1005E	1031	1005	S09	W63	.904	12545	4.7	26D	-N		C	1005	.21				DHK
TEHR	09	1005E	1010D	1005U	S10	W63	.905	12545	4.7	5D	-N	3	V		.08				DE
888 RAMY	09	1303	1333	1305	S10	W65	.919	12545	4.7	30	--F	3	C		.19				DE 3
892 PALE	09	2017	2029	2022	S07	W70	.946	12545	4.6	12	--F	3	C		.36				DE 2
893 PALE	09	2104	2113	2107	S07	W70	.946	12545	4.6	9	--N	3	C		.27				1
894 PALE	09	2142	2151	2145	S07	W71	.951	12545	4.6	9	--F	3	C		.45				F 1
896 PALE	09	2332E	0017	2334U	S07	W73	.961	12545	4.5	45D	--F	3	V		.83				3
901 MONT	10	1010	1052	1016	S09	W80	.988	12545	4.4	42	-N		C	1016	.72				5
GRP49903	10	1645	1712	1652	S08	W87	.999	12545	4.2	27	--F				.62				3 3 1 4
CANR	10	1640	1730	1656	S10	W88	1.000	12545	4.1	50	-F		V		.62	1.80			
RAMY	10	1647	1702	1650	S07	W85	.997	12545	4.3	15	-N	2	C						DE
MCMA	10	1648	1703	1650	S08	W88	1.000	12545	4.1	15	-F		C	1650					D
904 PALE	10	1845E	1858	1851	S06	W85	.997	12545	4.4	13D	--F	2	C		.36				2
905 PALE	10	2215E	2245	2217U	S06	W88	1.000	12545	4.3	30D	--F	2	C		.36				2
	11	1754	1836	NO FLARE PATROL															
	11	1922	2006	NO FLARE PATROL															
	11	2014	2017	NO FLARE PATROL															
	11	2028	2039	NO FLARE PATROL															
	11	2302	2316	NO FLARE PATROL															
	11	2333	0009	NO FLARE PATROL															
	12	0018	0054	NO FLARE PATROL															
	12	1856	1930	NO FLARE PATROL															
906 PALE	13	0037	0108	0045	N12	W07	.159	12556	12.5	31	--F	2	C		.72				DE 3
	13	0602	0611	NO FLARE PATROL															
	13	1930	1949	NO FLARE PATROL															
	13	1950	1955	NO FLARE PATROL															
	13	2001	2026	NO FLARE PATROL															
	13	2035	2043	NO FLARE PATROL															

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	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	MAX. INT. %	
	13	2057	2100	NO FLARE PATROL															
GRP49909	14	1503	1520	1505	N14	W32	.537	12556	12.2	17	--N				.40				3 3 3 3
CANR	14	1502	1520	1505	N12	W32	.532	12556	12.2	18	-F		V		.41				
RAMY	14	1503	1525	1504	N14	W32	.537	12556	12.2	22	-N	3	C		.37				DE H
MCMA	14	1504E	1515	1506	N15	W32	.540	12556	12.2	110	-N		C	1506	.41	.50			CEH
GRP49910	14	1900	1920	1907	N15	W34	.568	12556	12.2	20	--F				.35				2 2 2 2
RAMY	14	1900	19090	1904U	N14	W34	.565	12556	12.2	90	-F	1	C		.28				DE
MCMA	14	1900	1920	1909	N15	W34	.568	12556	12.2	20	-N		C	1909	.41	.50			E
	14	1928	1929	NO FLARE PATROL															
	14	1931	2045	NO FLARE PATROL															
920 PALE	16	1824E	18300	1825U	N15	W57	.835	12556	12.5	60	--F	2	C		.36				F 2
	16	1944	2000	NO FLARE PATROL															
	16	2013	2046	NO FLARE PATROL															
922 MANI	17	0252E	02570	0252U	N12	W63	.882	12556	12.4	50	--N	1		0252	.41	.79			F 3
GRP49929	17	1014	1042	1019	S03	W52	.800	12571	13.5	28	--N				.28				3 3 3 8
MONT	17	1013E	1046	1021	S02	W51	.787	12571	13.6	330	-N		C	1021	.21				D
ATHN	17	1014E	1031	1015	S05	W53	.815	12571	13.5	170	-F	3	V		.33				OE
CATA	17	1015	1050	1020	S02	W52	.798	12571	13.5	35	-N	1		1020	.29	.47		(1660)	
	17	1912	1936	NO FLARE PATROL															
	18	2030	2045	NO FLARE PATROL															
	19	0350	0403	NO FLARE PATROL															
	19	0407	0415	NO FLARE PATROL															
	19	0440	0447	NO FLARE PATROL															
	19	1741	1805	NO FLARE PATROL															
	19	1834	1841	NO FLARE PATROL															
	19	1843	1859	NO FLARE PATROL															
	19	1903	1923	NO FLARE PATROL															
	19	1942	2053	NO FLARE PATROL															
	19	2058	2129	NO FLARE PATROL															
	19	2213	2303	NO FLARE PATROL															
	19	2318	2323	NO FLARE PATROL															
	20	1831	1848	NO FLARE PATROL															
	20	1857	1901	NO FLARE PATROL															
	20	1922	1923	NO FLARE PATROL															
	20	1956	2113	NO FLARE PATROL															
GRP49933	21	1135	1155	1145	S13	E89	1.000	12584	28.2	20	1F				.57				3 3 2 5
KHAR	21	1133E	11400		S13	E90	1.000	12584	28.2	70	1F		P						
CATA	21	1135E	12000	1145	S14	E90	1.000	12584	28.2	250	1F	3		1145	.87			(1450)	T
HUAN	21	1137	1150	1144U	S12	E88	1.000	12584	28.1	13	-F	1	C	1144	.26				T
GRP49934	21	1437	1500	1442	S12	E88	1.000	12584	28.2	23	-F				.31				3 2 1 4
MCMA	21	1425E	14400		S12	E90	1.000	12584	28.4	150	-N		C	1430					
HUAN	21	1435	1500	1442U	S12	E88	1.000	12584	28.2	25	-F	1	P	1442	.31				
RAMY	21	1439	1500		S12	E87	1.000	12584	28.1	21	-N	4	C						DE
GRP49936	21	1655	1713	1659	S12	E87	1.000	12584	28.2	18	--F				.26				2 2 1 4
HUAN	21	1653	1713	1659U	S12	E88	1.000	12584	28.3	20	-F	1	C	1659	.26				D
RAMY	21	1656	17100		S12	E86	.999	12584	28.2	140	-N	3	C						DE
937 HUAN	21	1820	1827	1822	S12	E88	1.000	12584	28.4	7	--F	1	C	1822	.31				3
938 HUAN	21	1920	1928	1923	S12	E87	1.000	12584	28.3	8	-N	1	C	1923	.26				D 3

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	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
935 HUAN	21	1937	1957		S12	E87	1.000	12584	28.3	20	--F	1	C	1939	.26				0 1
940 PALE	21	2334E	2347	2337U	S15	E82	.994	12584	28.1	130	--F	2	C		.55				F 4
941 ARCE	22	0815E	0835D		S13	E78	.984	12584	28.2	200	--N		C	0820	.22				4
GRP49942	22	1122	1135	1129	S18	E88	1.000	12588	29.1	13	-N				1.19				4 4 2 5
TEHR	22	1121	1247	1130	S19	E88	1.000	12588	29.1	86	-N	3	C		.83				F Y
RAMY	22	1121E	1132		S16	E85	.998	12588	28.8	110	-N	3	C						DE
MONT	22	1123	1144	1128	S18	E88	1.000	12588	29.1	21	-N		C	1128	1.55				E
HUAN	22	1127E	1128		S17	E90	1.000	12588	29.2	10	-F	1	P	1128					
943 HUAN	22	1418	1430	1422	S09	E67	.929	12584	27.6	12	--F	1	C	1422	.31				E 2
944 MCMA	22	1635	1651	1639	S12	E68	.938	12584	27.8	16	--N		C	1639	.21	.50			0 2
945 MCMA	22	1658	1723D	1709	S12	E68	.938	12584	27.8	250	--F		C	1709	.21	.50			0 3
946 MCMA	22	1735E	1825		S12	E67	.932	12584	27.8	500	--F		C	1753	.41	1.00			E 2
	22	1951	2022	NO FLARE PATROL															
	22	2024	2129	NO FLARE PATROL															
	22	2148	2201	NO FLARE PATROL															
	22	2212	2225	NO FLARE PATROL															
GRP49947	23	0938	0949	0943	S09	E61	.887	12584	28.0	11	--N				.33				2 2 2 5
ARCE	23	0935E	0945D		S10	E60	.880	12584	27.9	100	-N		C	0936	.25	.50			
CANR	23	0941	0949	0943	S08	E61	.885	12584	28.0	8	-N		V	0943	.41	.80			
GRP49948	23	1015	1030	1023	S14	E59	.880	12584	27.9	15	--N				.38				5 5 5 6
ARCE	23	1000E	1020D		S13	E58	.870	12584	27.8	200	-N		C	1018	.32	.60			
MONT	23	1009	1029	1023	S14	E57	.864	12584	27.7	20	-N		C	1023	.31				0
TEHR	23	1010	1031	1021	S16	E58	.876	12584	27.8	21	-N	3	C		.34				DE
MONT	23	1019	1028	1021	S13	E60	.886	12584	27.9	9	-N		C	1021	.21				
ATHN	23	1020E	1029D	1022	S15	E58	.874	12584	27.9	90	-N	2	C		.33				DE
CANR	23	1022	1030	1024	S14	E62	.902	12584	28.1	8	-N		V	1025	.62	1.10			
GRP49954	23	1534	1551	1536	S16	E63	.912	12584	28.4	17	--N				.26				2 2 2 3
HUAN	23	1534	1553	1536	S15	E63	.911	12584	28.4	19	-N	2	C	1536	.26	.42			0
MCMA	23	1534	1549	1535	S16	E62	.906	12584	28.3	15	-N		C	1535	.26	.50			E
955 MCMA	23	1725	1732	1727	S15	E57	.866	12584	28.0	7	--F		C	1727	.21	.30			0 3
GRP49958	23	2043	2109	2046	S15	E52	.823	12584	27.8	26	--F				.61				2 2 2 2
PALE	23	2043	2109	2047	S15	E53	.832	12584	27.8	26	-F	3	C		.55				DE
RAMY	23	2045E	2107D	2045U	S15	E51	.813	12584	27.7	220	-F	4	V		.66				F
959 PALE	23	2136	2203	2138	S16	E51	.817	12584	27.7	27	--N	3	C		.36				F 2
GRP49960	24	0033	0059	0039	S15	E66	.930	12588	29.0	26	1N				1.17				3 3 3 5
PALE	24	0031	0045D	0038	S15	E67	.936	12588	29.0	140	1B	3	V		1.34				DE U
PALE	24	0031	0105	0034	S15	E67	.936	12588	29.0	34	-N	3	V		.72				DE U
MITK	24	0033	0058	0042	S16	E65	.925	12588	28.9	25	1N		C	0042	1.13				E
CRON	24	0036	0054	0038	S15	E65	.924	12588	28.9	18	1N		V		1.03				
4 STATIONS REPORTING GROUP 49961. 0 STATIONS OBSERVING AND NOT REPORTING.																			
GRP49961	24	0033	0059	0037	S16	E54	.843	12584	28.1	26	1N				1.40				3 3 3 4
MITK	24	0033	0048	0039	S15	E50	.804	12584	27.8	15	1N		C	0039	1.75	2.80			
PALE	24	0033	0105	0034	S16	E57	.868	12584	28.3	32	-N	3	C		.91				DE
MANI	24	0034E	0105	0038	S16	E56	.860	12584	28.2	310	1N	1		0038	1.55	2.82			
962 PALE	24	0118	0133	0124	S15	E86	.999	12598	30.5	15	-N	3	C		.36				4
GRP49963	24	1628	1645	1635	N17	E90	1.000	12590	31.4	17	--F								2 2 0 4
RAMY	24	1628	1645	1633	N18	E90	1.000	12590	31.4	17	-N	4	C						
MCMA	24	1630E	1644D	1637	N16	E90	1.000	12590	31.4	140	-F		C	1637					
	24	2141	2142	NO FLARE PATROL															
	24	2155	2217	NO FLARE PATROL															
GRP49966	25	1053	1107	1055	N17	E82	.987	12590	31.6	14	-N				.45				3 3 3 7
MEUD	25	1051	1105	1055	N16	E80	.982	12590	31.5	14	-F		C	1055	.31				
MONT	25	1052	1101	1055	N18	E86	.996	12590	31.9	9	-N		C	1055	.41				0
CANR	25	1056	1114		N16	E79	.978	12590	31.4	18	-N		V	1058	.62				

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
GRP49967	25	1124	1142	1127	S15	E30	.586	12584	27.7	18	--N				.79				4 4 4 7
CANR	25	1123	1144	1126	S15	E30	.586	12584	27.7	21	-N		V	1126	1.65	1.90			
RAMY	25	1124	1138	1126	S15	E29	.574	12584	27.7	14	-N	4	C		.46				DE
MCNT	25	1125	1148	1129	S16	E30	.593	12584	27.7	23	-B		C	1129	.52				
MEUO	25	1125	1138	1126	S15	E29	.574	12584	27.7	13	-M		C	1126	.52	.60			E
GRP49968	25	1322	1333	1325	N17	E84	.992	12590	31.9	11	--F				.52				2 2 1 6
MEUO	25	1320	1333	1326	N16	E80	.982	12590	31.6	13	-F		C	1326	.52				
HUAN	25	1323	1332	1324	N17	E88	.998	12590	1.2	9	-F	1	C	1324					
GRP49970	25	1425	1623	1551	N15	W20	.375	12577	24.1	118	--F				.39				4 4 4 5
MCMA	25	1425	1550D	1455	N15	W21	.389	12577	24.0	85D	-F		C	1455	.31	.30			EM
RAMY	25	1542E	1615	1542U	N15	W22	.404	12577	24.0	33D	-F	3	C		.23				DE
MCMA	25	1551	1645	1600	N15	W20	.375	12577	24.2	54	-N		C	1600	.41	.40			E
HUAN	25	1557E	1608		N14	W19	.354	12577	24.2	11D	-F	2	C	1559	.52	.55			CE
CANR	25	1559E	1559D		N17	W19	.376	12577	24.2	.	-N		V		.41	.50			
GRP49971	25	1552	1604	1554	S16	E27	.560	12584	27.7	12	--F				.25				2 2 2 5
RAMY	25	1552	1602	1554	S14	E27	.543	12584	27.7	10	-F	3	C		.28				DE
MCMA	25	1552E	1605	1553	S17	E27	.568	12584	27.7	13D	-N		C	1553	.21	.20			E
GRP49972	25	1719	1756	1727	N15	W22	.404	12577	24.1	37	--N				.45				4 4 4 5
MCMA	25	1717	1805	1732	N15	W21	.389	12577	24.1	48	-N		C	1732	.46	.50			E
HUAN	25	1719E	1737D		N14	W21	.383	12577	24.1	18D	-F	2	P	1727	.31	.34			C
RAMY	25	1720	1758	1725	N15	W23	.418	12577	24.0	38	-N	3	V		.37				DE
PALE	25	1721E	1745	1723U	N15	W22	.404	12577	24.1	24D	-N	2	V		.67				F
973 RAMY	25	2037E	2055	2040U	N15	W25	.446	12577	24.0	18D	--F	3	V		.28				DE 2
974 PALE	25	2126E	2135	2128U	S15	E28	.563	12584	28.0	9D	--N	3	V		.26				2
975 PALE	25	2141E	2149D	2144U	S12	E27	.527	12584	27.9	8D	--N	3	V		.21				F 2
	25	2202	2215	NO FLARE PATROL															
GRP49976	25	2336	2353	2341	S15	E25	.528	12584	27.9	17	--N				.83				1 1 1 4
MITK	25	2336E	2353	2341	S15	E27	.551	12584	28.0	17D	-N		C	2341	.83	1.00			D
MITK	25	2336E	2341	2338	S15	E23	.506	12584	27.7	5D	-N		C	2338	.62	.70			D
GRP49979	26	0727	0750	0732	S16	E18	.462	12584	27.7	23	--N				.79				4 4 4 4
TACH	26	0724	0742	0733	S16	E20	.482	12584	27.8	18	-B		C	0733	1.19	1.36	2.15	48	EZ
TEHR	26	0726	0851	0731	S16	E18	.462	12584	27.7	85	-N	2	C		.45				DE
CRON	26	0728	0749	0733	S17	E18	.474	12584	27.7	21	-N		V		.41				
BUCA	26	0730	0758		S15	E17	.440	12584	27.6	28	-N		C	0732	1.10	1.20			
CRON	26	0840	0849		S17	E18	.474	12584	27.7	9	-F		V		.31				
981 MEUO	26	1301	1310	1302	S10	E17	.384	12584	27.8	9	--F		C	1302	.31	.30			D 3
GRP49982	26	1737	1748	1740	S15	E16	.431	12584	27.9	11	--F				.32				2 2 2 2
RAMY	26	1735	1750	1739	S14	E16	.419	12584	27.9	15	-F	3	C		.23				DE
PALE	26	1739	1746	1741	S16	E15	.434	12584	27.9	7	-N	3	V		.41				F
983 PALE	26	1754	1800	1756	S16	E15	.434	12584	27.9	6	--N	4	V		.41				DE 2
984 PALE	26	2116	2127D	2118	S13	E14	.386	12584	27.9	11D	--N	2	V		.62				DE 2
985 PALE	26	2119	2133	2122	S15	E27	.550	12584	28.9	14	--N	2	C		.27				2
986 PALE	26	2132E	2136D	2133U	S13	E14	.386	12584	27.9	4D	--N	3	V		.52				DE 1
GRP49987	26	2135	2236	2151	S14	E24	.507	12584	28.7	61	-N				1.44				1 1 1 1
PALE	26	2135E	2151D		S12	E26	.514	12584	28.8	16D	-F	1	C						
PALE	26	2145E	2236	2151U	S16	E22	.504	12584	28.6	51D	-N	2	V		1.44				F
988 PALE	26	2240	2246	2243U	S16	E12	.408	12584	27.9	6	--N	2	V		.62				2
989 PALE	27	0016E	0024	0018U	N17	E73	.953	12590	1.5	8D	--F	2	C		.19				3
990 PALE	27	0215	0236D	0220	S16	E23	.513	12584	28.8	21D	--F	2	C		.91				F 3
GRP49991	27	0503	0510	0506	S15	E08	.365	12584	27.9	7	--F				.43				3 3 3 4
TEHR	27	0503	0510	0505	S15	E07	.359	12584	27.7	7	-F	2	C		.33				DE
RAMY	27	0503	0510	0505	S15	E07	.359	12584	27.7	7	-F	4	C		.33				DE
MANI	27	0504E	0508D	0508U	S15	E10	.378	12584	28.0	4D	-N	2		0508	.62	.67			
992 TEHR	27	0550	0613	0559	N23	E60	.871	12590	31.7	23	--F	2	C		.25				DE 2

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
GRP49993	27	0632	0639	0635	N23	E60	.871	12590	31.8	7	--F				.25				2 1 1 5
TEHR	27	0632	0639	0635	N23	E60	.871	12590	31.8	7	-F	2	C		.25				DE S
ABST	27	0634	0658	0648	N22	E64	.900	12593	1.1	24	-F		C	0648	.63	1.30		71	DJK
GRP49995	27	0800	0826	0811	S15	E08	.365	12584	27.9	26	--F				.55				4 4 3 10
ISTA	27	0740E	0820	0810	S15	E08	.365	12584	27.9	400	-F								D
MONT	27	0759	0829	0811	S15	E08	.365	12584	27.9	30	-N		C	0811	.21				D
BUCA	27	0800	0825		S15	E06	.354	12584	27.8	25	-F		C	0809	.55	.60			D
ABST	27	0808	0829	0811	S15	E08	.365	12584	27.9	21	-N		C	0811	.90	1.00		78	D
GRP49996	27	1354	1401	1356	S14	E05	.334	12584	28.0	7	--F				.30				2 2 2 5
MEUD	27	1354	1356	1354	S14	E05	.334	12584	28.0	2	-F		C	1354	.41	.40			E
RAMY	27	1354	1406	1357	S13	E05	.318	12584	28.0	12	-F	4	C		.19				DE
GRP49997	27	1547	1746	1625	N18	E55	.822	12590	31.8	119	2B				3.74				4 2 2 4
MEUD	27	1546	1549D		N18	E54	.812	12590	31.7	3D	-N		C	1548	1.03	1.70			E
HUAN	27	1547	1732D	1614U	N18	E55	.822	12590	31.8	105D	2N	1	P	1614	3.09	5.40			U
RAMY	27	1547	1730D	1606	N18	E54	.812	12590	31.7	103D	2B	4	C		4.38				U
PALE	27	1650E	1747	1655U	N18	E54	.812	12590	31.8	57D	1N	2	V		2.27				U
PALE	27	1709E	1745		N18	E53	.803	12590	31.7	36D	1N	2	C						U
998 PALE	27	2006E	2016	2007U	S14	E01	.324	12584	27.9	10D	--N	2	V		.62				DE 1
	27	2048	2123	NO FLARE PATROL															
	27	2148	2206	NO FLARE PATROL															
	27	2222	2238	NO FLARE PATROL															
	28	0013	0021	NO FLARE PATROL															
	28	0202	0237	NO FLARE PATROL															
	28	0239	0340	NO FLARE PATROL															
	28	0400	0412	NO FLARE PATROL															
	28	0414	0440	NO FLARE PATROL															
	28	0554	0615	NO FLARE PATROL															
	28	0635	0644	NO FLARE PATROL															
	28	0645	0657	NO FLARE PATROL															
GRP49999	28	0851	0924	0855	S13	W06	.322	12584	27.9	33	1B				2.59				4 4 4 4
ARCE	28	0850	0925	0855	S12	W06	.306	12584	27.9	35	1B		C	0855	2.40	2.50			
BUCA	28	0851	0920		S12	W06	.306	12584	27.9	29	1N		P	0853	2.76	2.90			E
TEHR	28	0851E	0921	0855	S13	W06	.322	12584	27.9	30D	-B	3	V		1.07				UDE
WEND	28	0856E	0928		S14	W05	.333	12584	28.0	32D	1N		P		4.13				
GRP50000	28	0949	1005	0954	S15	W07	.358	12584	27.9	16	-N				1.23				2 2 2 3
ARCE	28	0949	1004	0954	S14	W07	.343	12584	27.9	15	-N		C	0954	1.01	1.10			
MEUD	28	0949	1005	0953	S15	W07	.358	12584	27.9	16	-N		C	0953	1.44	1.50			E
GRP50002	28	1049	1056	1050	S16	W08	.379	12584	27.9	7	--F				.25				2 2 2 5
RAMY	28	1048	1056	1050	S16	W08	.379	12584	27.8	8	-F	3	C		.19				DE
MEUD	28	1049	1055	1050	S16	W08	.379	12584	27.9	6	-N		C	1050	.31	.30			D
GRP50003	28	1759	1808	1803	S17	W12	.420	12584	27.8	9	--F				.40				2 2 2 3
PALE	28	1758E	1808D	1803	S17	W13	.427	12584	27.8	10D	-F	3	V		.52				DE
RAMY	28	1800	1808	1802	S16	W11	.398	12584	27.9	8	-F	4	C		.28				DE
004 PALE	28	1831E	1835D	1833	N14	E37	.610	12590	31.5	4D	--N	3	V		.41				DE 2
	28	2000	2006	NO FLARE PATROL															
	28	2107	2240	NO FLARE PATROL															
005 VORO	28	2258	2310		N20	E36	.618	12590	31.7	12	-B		C	2300	1.02	1.25		78	CEH 1
006 MITK	29	0445	0453D	0447	S16	W17	.449	12584	27.9	8D	--N		C	0447	.83	.90			E 3
009 RAMY	29	1550	1623	1553	N16	E23	.427	12590	31.4	33	--F	2	C		.37				F 1
	29	1600	1611	NO FLARE PATROL															

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	HEMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
GRP50010	29	1820	1846	1834	N20	E27	.506	12590	31.8	26	--F				.75				2 2 2 2
RAMY	29	1820	1849	1834	N20	E26	.493	12590	31.7	29	-F	4	C		.46				U
PALE	29	1827E	1842	1833	N20	F27	.506	12590	31.8	150	-N	3	V		1.03				U F
GRP50011	29	1836	1847	1840	N16	E23	.427	12590	31.5	11	--F				.20				2 2 2 2
RAMY	29	1836	1848	1839	N16	E21	.399	12590	31.4	12	-F	3	C		.19				
PALE	29	1840E	1846	1841	N15	E24	.435	12590	31.6	60	-N	3	V		.21				OE
	29	1932	1942	NO FLARE PATROL															
	29	1945	2222	NO FLARE PATROL															
012 WORO	30	0117	0137	0123	S13	W28	.543	12584	28.0	20	-B		C	0123	1.57	1.83		66	EJ 2
013 CROM	30	0441E	0510		N13	E15	.293	12590	31.3	29C	--N		V		.83				1
GRP50018	30	1439	1518	1449	S16	W34	.635	12584	28.1	39	-N				.81				6 5 5 6
MEUD	30	1430	15210		S17	W34	.642	12584	28.1	51C	-N		C	1445	.41	.50			
CATA	30	1440	1530D	1450	S17	W34	.642	12584	28.1	50D	-B	1		1450	.58	.75		(240)	
RAMY	30	1440E	1615D	1446	S15	W33	.617	12584	28.1	95D	-N	4	V		.99				OE
ATHN	30	1442E	1500	1445	S16	W33	.624	12584	28.1	18D	-N	2	V		.50				OE
CANR	30	1443	1453D	1453	S16	W34	.635	12584	28.1	10D	-N		V	1453	1.55	1.80			
CANR	30	1443	1453D	1447	S13	W34	.617	12584	28.1	10D	-F		V		.83	.80			
CAPF	30	1500	1510		S13	W37	.653	12584	27.9	10	1N		P	1504	2.89	3.64			
CANR	30	1518	15190	1519	S14	W34	.623	12584	28.1	10	-N		V		.62	.60			
	30	1835	1858	NO FLARE PATROL															
	30	1901	1934	NO FLARE PATROL															
	30	1955	2229	NO FLARE PATROL															
GRP50019	30	2344	2349	2345	S15	W40	.697	12584	28.0	5	--N				.44				3 3 3 3
VCRO	30	2343	2348	2344	S17	W40	.707	12584	28.0	5	-B		C	2344	.28	.38		67	E
MITK	30	2345	2349	2346	S15	W41	.708	12584	27.9	4	-N		C	2346	.52	.70			E
CROM	30	2345E	2350		S13	W38	.664	12584	28.1	50	-F		V		.52				
GRP50020	31	0307	0352	0347	N21	E09	.320	12590	31.8	45	--F				.59				2 2 2 3
CROM	31	0307E	0353		N20	E09	.306	12590	31.8	46D	-N		V		.93				
TEHR	31	0347E	0351	0347U	N22	E09	.335	12590	31.8	4D	-F	2	V		.25				F

Note:
A line of explanation has been added before each flare event having more than one maxima. The total number of stations reporting some part of the event is given. The number of stations observing at the time of the principal maximum but not reporting the event is given in the second statement. Care should be exercised in utilizing the numbers in the remarks column. The first number is the number of stations reporting the individual maximum, and not the total number of stations reporting some part of the flare event. The last number is the number of stations reporting at the time of the individual maximum and not necessarily the total number of stations observing during the flare event. GRP numbers may appear several times in order to indicate secondary maxima. An asterisk beside an importance indicates a secondary maximum. The word "GRP" has also been omitted to aid in pointing to this condition.
When it is impossible to determine the time of Maximum Phase from the individual reports the time of Area Measurements is used. This time appears in parentheses. For Flares reported by only one station the last 3 digits of the group number appear to the left of the station code.

In the importance column "--" signifies the subflare has been confirmed by the NOAA grouping program but is not included in the I.A.U. Quarterly Bulletin on Solar Activity. These subflares are also not included in the Flare Index below.

DAILY FLARE INDICES

Date	Flare Index	HR OBS	Date	Flare Index	HR OBS	Date	Flare Index	HR OBS
731001	67.93	22.9	731011	0.00	21.5	731021	2.58	24.0
731002	2.76	23.0	731012	0.00	22.0	731022	7.86	22.0
731003	13.96	23.5	731013	0.00	22.9	731024	18.25	21.6
731004	41.14	24.0	731014	0.00	22.0	731025	1.07	23.0
731005	19.88	24.0	731016	0.00	23.2	731026	10.94	24.0
731006	19.68	21.5	731017	0.00	23.6	731027	73.82	22.9
731007	1.25	20.9	731018	0.00	23.0	731028	52.14	19.3
731008	13.72	21.4	731019	0.00	19.0	731029	0.00	21.0
731010	2.74	24.0	731020	0.00	22.4	731030	18.39	20.5

When no Flare Index is given, it is 0 for that day.

SOLAR FLARES
Unconfirmed
OCTOBER 1973

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH °	MAX. INT. %	
822 MCNT	01	0809	0822	0813	N12	W67	.915	12535	26.3	13	-N		C	0813	.21				D 5
824 CANR	01	1004	1028	1007	N09	W71	.941	12532	26.1	24	-F		V	1007	.72				4
832 KODA	02	0250	0342	0330	S15	E10	.404	12542	2.9	52	-N		V	0330	1.61				CD 3
835 CRON	02	0910E	0925		N10	W82	.988	12532	26.2	150	-N		V		.41				4
843 ISTA	03	0710E	0715		S13	W31	.595	12540	1.0	5D	-N								D 6
844 WEND	03	0715	0730		S12	W07	.340	12542	2.8	15	-F								6
GRP49851	04	0911	0934	0916	S15	W45	.761	12540	1.0	23	-N				.11				2 2 2 8
ARCE	04	0910E	09400		S15	W45	.761	12540	1.0	300	-N		C	0915	.12	.20			
MCNT	04	0912	0928	0916	S14	W44	.746	12540	1.1	16	-N		C	0916	.10				
852 MONT	04	1025	1043	1027	S14	W25	.533	12542	2.6	18	-N		C	1027	.10				D 7
855 CATA	04	1445	1450	1445	S15	W21	.500	12542	3.0	5	-N	3		1445	.29	.33		(151)	4
GRP49864	05	0615	0628	0619	S16	W28	.584	12542	3.2	13	-N				.61				2 2 2 7
MANI	05	0615E	0628	0619	S17	W28	.592	12542	3.2	130	-N	2		0619	.31	.38			H
ABST	05	0615	0628	0618	S15	W27	.564	12542	3.2	13	-N		C	0618	.90	1.10			D
GRP49865	05	0707	0716	0711	S16	W52	.831	12540	1.4	9	-N				.40				2 2 2 8
MANI	05	0707E	0715D	0710	S16	W52	.831	12540	1.4	8D	-N	2		0710	.52	.68			F
TEHR	05	0710E	0716	0711U	S16	W52	.831	12540	1.4	6D	-N	2	C		.28				F
867 MCNT	05	1012	1019	1014	S16	W54	.848	12540	1.4	7	-N		C	1014	.41				E 7
869 CATA	05	1350E	1350D	1350	S16	W55	.856	12540	1.5		-N	3		1350	.58	1.12		(166)	7
878 ABST	07	0635	0717	0640	N14	W55	.815	12543	3.1	42	-F		C	0640	.72	1.20		48	D 5
GRP49879	07	0715	0734	0722	N22	W83	.988	12537	1.1	19	-F				.57				2 2 2 6
ABST	07	0714	0725D	0723	N23	W86	.994	12537	30.9	110	1F		P	0723	.81			49	D
ATHN	07	0715	0734	0720	N20	W80	.980	12537	1.3	19	-F	3	C		.33				DE
885 ABST	09	0552E	0638	0556	S08	W62	.895	12545	4.6	46D	-N		P	0556	.90	1.80		65	DJK 5
889 RAMY	09	1426	1442	1429	S10	W66	.925	12545	4.7	16	-F	3	C		.19				DE 5
890 RAMY	09	1431	1442	1434	S09	W16	.376	12549	8.4	11	-F	4	V		.19				DE 5
891 PALE	09	1658	1712	1703	S08	W69	.941	12545	4.5	14	-N	2	V		.31				3
895 MANI	09	2222E	2235D	2222U	S08	W72	.957	12545	4.5	13D	-N	1		2222	.41	.94			3
897 TEHR	10	0551	0605	0556	S10	W61	.890	12545	5.7	14	-N	2	C		.25				DE 5
898 TEHR	10	0621	0632	0626	S10	W61	.890	12545	5.7	11	-N	2	C		.17				DE 6
899 TEHR	10	0718	0738	0722	S10	W61	.890	12545	5.7	20	-F	2	C		.17				DE 8
900 MONT	10	0842	0904	0851	S09	W79	.985	12545	4.4	22	-N		C	0851	.10				D 10
902 MONT	10	1121	1125	1123	S17	W71	.961	12545	5.1	4	-N		C	1123	.41				G 6
907 ISTA	14	0855	0908		N13	W28	.477	12556	12.3	13	-F								D 5
908 RAMY	14	1102	1132	1104	N13	W29	.491	12556	12.3	30	-F	3	C		.56				DE H 4
911 PALE	14	2319E	2322	2319U	S10	W36	.633	12573	12.3	3D	-F	3	C		.27				4
912 CATA	15	1330	1345D	1340	N13	W42	.669	12556	12.4	15D	-F	1		1340	.29	.39		(148)	5
913 RAMY	15	1609E	1614D	1609U	S04	W32	.551	12571	13.3	5D	-F	1	C		.28				DE 4
914 PALE	16	0008	0011D	0009U	N15	W54	.807	12556	12.0	3D	-F	2	V		.31				3
915 PALE	16	0050E	0057D	0051U	N14	W50	.764	12556	12.3	7D	-F	2	C		.36				4
916 PALE	16	0308E	0312	0309	N15	W55	.816	12556	12.0	4D	-F	2	C		.36				F 5
917 PALE	16	0316	0326D	0321	S13	E25	.517	12569	18.0	10D	-F	2	C		.36				5
918 PALE	16	1733E	1806	1734	N13	W57	.835	12556	12.5	33D	-F	3	V		.41				DE 3
919 PALE	16	1733E	1806	1754	N13	W57	.835	12556	12.5	33D	-F	3	V		.41				DE 3

SOLAR FLARES
Unconfirmed
OCTOBER 1973

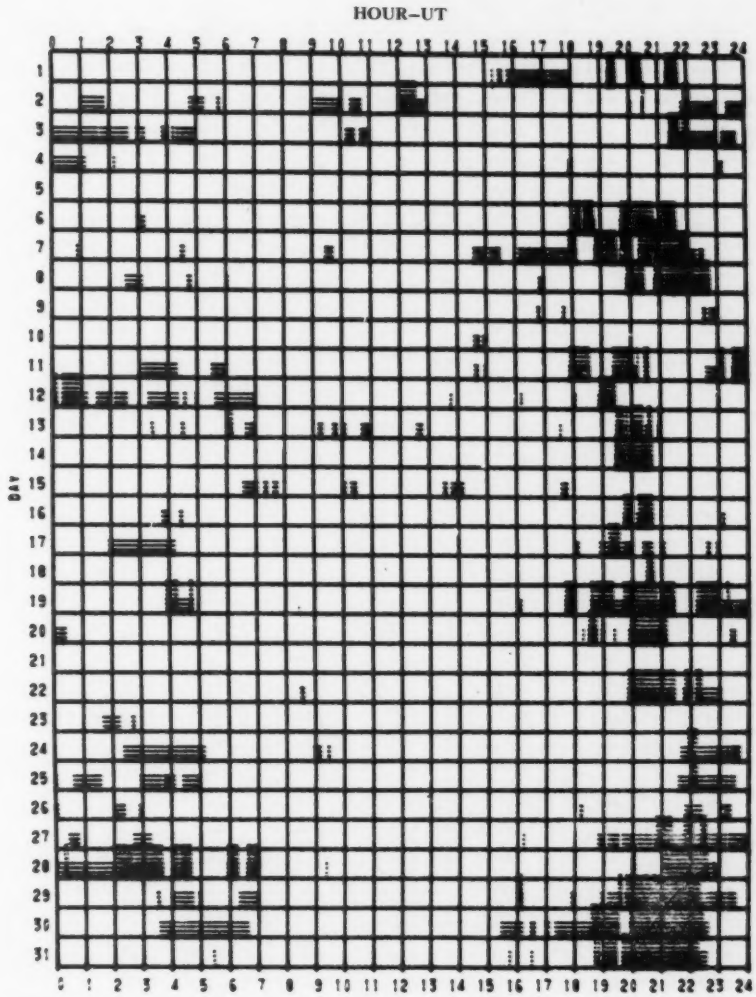
OBSERVATORY	DATE OCT	OBSERVED UT START	OBSERVED UT END	OBSERVED UT MAX. PHASE	LOCATION APPROX. LAT.	LOCATION APPROX. MER. DIST.	LOCATION CENTRAL DISTANCE	LOCATION MCMATH PLAGE REGION	LOCATION CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS TIME UT	MEASUREMENTS MEAS. AREA Sq. Deg.	MEASUREMENTS CORR. AREA Sq. Deg.	MEASUREMENTS MAX. WIDTH HG	MEASUREMENTS MAX. INT. %	REMARKS
921 PALE	16	1919E	1926	1921	N13	W57	.835	12556	12.5	7D	-F	3	V		.31				DE 3
923 ATHN	17	0538E	0547D	0540	N11	W65	.898	12556	12.4	9D	-F	1	C		.50				DE 6
GRP49924	17	0639	0659	0641	N11	W68	.920	12556	12.2	20	-F				.50				2 2 2 7
TEHR	17	0637E	0651	0637U	N10	W68	.920	12556	12.2	14D	-F	3	V		.33				DE
ATHN	17	0640	0706	0644	N11	W68	.920	12556	12.2	26	-N	3	C		.66				F
925 ATHN	17	0731E	0746	0734	N11	W67	.913	12556	12.3	15D	-N	3	C		.66				DE 8
926 ARCE	17	0940E	1000D		N13	W53	.789	12556	13.4	20D	-B		C	1000	.32	.40			8
927 TEHR	17	1011E	1023	1011U	S06	W50	.788	12557	13.7	12D	-F	3	V		.25				DE 7
929 ABST	17	1236E	1254D	1238	N12	W68	.919	12556	12.4	18D	1F		P	1238	1.62	3.70			F 5
930 MCMA	17	1351E	1415		N12	W70	.932	12556	12.3	24D	-N		P	1351	.41	.90			E 5
931 MITK	18	0106	0118	0107	N11	W78	.975	12556	12.2	12	-N		C	0107	.62				DH 5
932 ABST	18	1237	1254D	1241	N12	W82	.988	12556	12.4	17D	1F		P	1241	.90				D 7
935 RAMY	21	1445	1456	1447	S12	E22	.469	12578	23.3	11	-F	4	C		.28				DE 4
949 MONT	23	1052	1108	1057	S14	E57	.864	12584	27.7	16	-F		C	1057	.10				5
950 MONT	23	1137	1141	1139	S13	E60	.886	12584	28.0	4	-N		C	1139	.21				4
951 ATHN	23	1208	1215	1210	S11	E55	.840	12584	27.6	7	-F	2	C		.50				DE 4
952 RAMY	23	1217E	1235D	1220U	S10	E63	.903	12584	28.2	18D	-F	4	V		.83				F 4
953 MCMA	23	1430	1436	1432	S12	E56	.851	12584	27.9	6	-F		C	1432	.21	.30			D 5
956 PALE	23	1751E	1801	1752U	S15	E52	.823	12584	27.6	10D	-F	3	V		.41				DE 4
957 RAMY	23	1929	1938	1932	S15	E52	.823	12584	27.7	9	-F	4	V		.50				F 3
964 MONT	25	0829	0852	0834	S10	E31	.564	12584	27.7	23	-N		C	0834	.21				D 7
965 CANR	25	0950	1002		N16	E80	.982	12590	31.4	12	-F		V	1000	.52				7
969 RAMY	25	1328E	1340D	1331	N07	W54	.806	12576	21.5	12D	-F	4	V		.28				7
977 PALE	26	0016	0025	0018U	N18	E71	.942	12590	31.3	9	-F	3	V		.31				4
978 PALE	26	0217	0226D	0220	S16	E22	.504	12584	27.7	9D	-F	3	V		1.24				F 4
980 MANI	26	0823E	0837D	0825U	N15	E70	.936	12590	31.6	14D	-N	1		0825	.41	.88			8
994 CATA	27	0735E	0840D	0745	N21	E60	.869	12590	31.8	65D	-F	3		0745	.58	1.17		(145)	8
001 ARCE	28	1029	1040	1033	S16	W10	.391	12584	27.7	11	-F		C	1033	.35	.40			6
007 MANI	29	0728	0739	0733	S16	W16	.439	12584	28.1	11	-N	2		0733	.31	.34			7
008 MONT	29	0931	0942	0935	S10	W21	.432	12584	27.8	11	-N		C	0935	.10				D 5
014 MONT	30	0844	0857	0847	N12	E02	.133	12589	30.5	13	-F		C	0847	.21				9
015 MONT	30	0920	0941	0925	N14	E12	.261	12590	31.3	21	-F		C	0925	.05				9
GRP50016	30	1107	1123	1111	N16	E11	.271	12590	31.3	16	-F				.43				2 2 2 8
MEUD	30	1107	1123	1111	N15	E11	.259	12590	31.3	16	-F		C	1111	.72	.70			E
TEHR	30	1110E	1113D	1111U	N16	E11	.271	12590	31.3	3D	-F	2	C		.13				DE
017 MEUD	30	1134	1136	1134	S15	W32	.806	12584	28.1	2	-F		C	1134	.31	.40			8

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked assymetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

OCTOBER 1973



Observatories included in total patrol:

Abastumani	Carnarvon	Huancayo	Locarno	Monte Mario	Teheran
Arcetri	Catania	Istanboul	Manila	Palehua	Upice
Athenes	Culgoora	Kharkov	McMath-Hulbert	Ramey	Voroshilov
Bucharest	Gran Canaria	Kiev	Meudon	Tachkent	Wendelstein
Capri-F (German)	Herstmonceux	Kodaikanal	Mitaka		

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and time of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

OCTOBER 1973

OCT. 1973	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
1	3750 TYKW	20	0357	0359.7	40	6.0	2.0		
	260 ONDR	45	0826	0826	1	20.0			
	200 GORK	6	0926.3	0927	1	60.0	30.0		
	100 GORK	6	0943.1	0943.7	.9	40.0	20.0		
	234 POTS	45	0946.4	0946.5	.2	7000.0	1200.0		
	100 GORK	6	1012.8	1012.9	.5	55.0	25.0		
	408 TRST	45	1106.3	1106.8	1.4	54.0	8.0		
	260 ONDR	45	1106	1107	2.5	25.0			
	100 GORK	6	1144	1144.3	1.2	30.0	15.0		
	8800 SGMR	3	1305.9	1306.1	.8	24.6	7.4		
	7000 SAOP	8	1305.8	1306.1	.7	43.3			
	4995 SGMR	3	1305.8	1306.1	.9	13.0	5.0		
	8800 ATHN	3	1306.2	1306.4	1.5	20.5	6.3		
	4995 ATHN	1	1306.1	1306.4	2.2	3.3	1.1		
	408 TRST	45	1328.7	1329.1	.6				
	18 MCMA	41	1331	1334	4			1	
	18 MCMA	41	1342	1345	3			1	
	18 MCMA	6	1445	1447	2			1	
2	1415 MANI	40	0258	0300.2	8	128.0	37.6		
	4995 MANI	2	0259	0300.5	4.3	8.7	4.4		
	3750 TYKW	45	0259	0300.3	4	21.0	5.0		
	2695 MANI	40	0259.7	0300.1	2.3	26.4	9.3		
	2000 TYKW	45	0259	0259.8	3	43.0	8.0		
	1420 CRON	8	0259	0301.5	4	222.0	89.0		
	1000 TYKW	45	0259	0300.1	3	275.0	50.0		
	606 MANI	40	0259.3	0259.9	6.7	88.0	12.7		
	9400 TYKW	1	0300	0301	3	3.0	1.0		
	4995 CRON	45	0300	0300.5	2.5	12.0	4.0		
	200 MIRA	27	0323	0357	65	10.0	3.0		
	260 ONDR	45	0912.5	0913.5	2	20.0			
	536 ONDR	5	0943	0943	.5	65.0			
	960 PENN	40	1217		11.4				
	10700 PENN	40	1218.3		10.3				
	3100 CRIM	4	1218	1221	10	10.0	5.0		
	4995 SGMR	3	1219.5	1221.1	5.4	27.2	8.2		
	3000 BERL	4	1219	1220.8	55	25.0	2.1		
	2800 OTTA	27	1219.5		225	2.0	1.7		
	2800 OTTA	3	1219.5	1221	5.5	27.0	9.0		
	2700 PENN	3	1219.2	1221	2.8	36.4	16.3		
	2695 SGMR	3	1219.4	1221.3	7.3	23.1	6.9		
	9500 BERL	1	1220	1220.7	15	6.2	2.4		
	8800 SGMR	3	1220.2	1221.1	3.3	13.1	3.9		
	7000 SAOP	21	1220.4	1221.2	11.3	13.2			
	7000 SAOP	20	1220.4		11.3	5.5			
	4995 CANR	8	1220	1221	2.5	21.0	7.0		
	4995 ATHN	3	1220.9	1221.4	3.3	18.3	5.2		
	2695 CANR	8	1220	1222	9.3	18.0	6.0		
	2695 ATHN	3	1220.2	1221.7	7.8	23.8	7.1		
	1500 BERL	4	1220	1221	15	8.9	2.0		
	1420 CANR	8	1220	1221.5	4.5	7.0	2.0		
	1415 SGMR	1	1220.6	1221.5	4.6	7.0	2.1		
	1415 ATHN	1	1220.9	1221.8	3.3	6.9	2.3		
	8800 ATHN	1	1221.1	1221.6	3.1	8.1	3.2		
	7000 SAOP	8	1221	1221.2	.8	8.8			
	2700 PENN	29	1222	1222.5	48.2	11.4	4.2		
	2800 OTTA	29	1225	1225	33	4.0	2.0		
	2800 OTTA	20	1425	1455	65	1.2	0.6		
	260 ONDR	45	1437.5	1439	2.5	20.0			
	18 MCMA	6	1756	1758	2				
	2800 OTTA	20	1913	1917	20	1.4	0.7	1	
	2800 OTTA	21	2123	2126.5	12	1.0	0.5		
	2800 OTTA	8	2128.3	2128.5	.5	1.0	0.5		
	1420 BOUL	3	2241.5	2242.5	2	3.0	1.0		
	2695 CRON	45	2357.5	2359.5	4.5	21.0	4.0		
3	260 ONDR	44	0830	1043	130	35.0			
	234 POTS	6	0930.9	0930.9	.1	750.0	250.0		
	100 GORK	44	0946		200 D		5.0		
	221 ABST	6	1033.8	1034	.5	16.0			
	260 ONDR	44	1140	1248	210	90.0			
	245 SGMR	43	1154.3	1251	622.70	75.6			
	234 POTS	45	1248.4	1248.4	.1	200.0	50.0		
	2800 OTTA	27	1300		270	3.0	2.7		
	2695 BOUL	3	1414.5	1415.5	1.5	4.0	1.0		
	2695 BOUL	3	1420	1421	2	3.0	1.0		
	1420 BOUL	45	1422.5	1424	5	2.0	1.0		
	2800 OTTA	1	1512.5	1514	4	1.6	0.8		
	2695 BOUL	3	1513.5	1515	4.5	3.0	1.0		
	7000 SAOP	1	1516.2	1519.1	8.1	9.0	5.6		
	7000 SAOP	22	1524.8		133.9	9.0			
	2800 OTTA	20	1702	1704	10	1.4	0.7		
	7000 SAOP	22	1737.8		14.9	4.5			
	2800 OTTA	20	2025	2040	65	1.4	0.7		
4	1420 CRON	8	0012.5	0014	2	8.0	3.0		
	260 ONDR	41	0700	0918.5	490	25.0			
	2695 CRON	3	0808.5	0811	6.5	3.0	1.0		
	3000 BERL	22	1104	1213.4	99	6.7			
	1500 BERL	20	1113	1140.5	87	2.5			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

OCTOBER 1973

OCT. 1973	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	REMARKS
	9500	BERL	20	1118.5	1142.5	83				
	29	UPIC		1128.5	1130.5	26.5	6.4			
	2800	OTTA	26	1225	1225	35	2.6	1.3		
	2800	OTTA	21	1500	1512	92	3.8	1.3		
	237	TRST	42	1514.1	1514.3	1.5	980.0			
	2800	OTTA	8	1515	1515.2	.5	1.2	0.6		
	2800	OTTA	20	1533	1537	10	2.6	1.3		
	2695	PENT	25	2210	2223	13	1.6	0.8		
	2695	PENT	2	2221	2222	2	1.0	0.5		
	2695	PENT	20	2230	2235	10	1.2	0.6		
	2695	PENT	20	2342	2353	40	3.2	1.6		
	2695	CRON	3	2347	2350	6.5	4.0	1.0		
5	3750	TYKW	20	0250	0343	150	5.0	2.0		
	3750	TYKW	45	0327	0328	4	2.0	1.0		
	2000	TYKW	45	0327	0343	100	5.0	1.5		
	1000	TYKW	45	0327	0329.4	35	52.0	7.0		
	200	HIRA	45	0327	0330.5	18	15.0	5.0		
	100	HIRA	45	0327	0330.6	26	20.0	5.0		
	200	GORK	6	0614.6	0614.8	.3	100.0	40.0		
	100	GORK	24	0614.5	0614.5	1.3	200.0D			
	100	HIRA	45	0614.3	0615	1	130.0	50.0		
	234	POTS	40	0619.3	0619.3	.9	250.0	4.0		
	200	GORK	24	0619.9	0620.1	.9	140.0D			
	200	HIRA	45	0619.5	0620	1.3	520.0	100.0		
	113	POTS	45	0619.3	0620	1.3	2800.0	70.0		
	100	GORK	24	0619.5	0619.5	1.8	200.0D			
	100	HIRA	45	0619.3	0620.2	1.5	200.0	70.0		
	260	ONDR	41	0650	0932	500	50.0			
	29	UPIC		0712.5	0713	1.5				
	221	ABST	6	1022	1022.5	.8	16.0			
	100	GORK	41	1051	1051.1	1.1	200.0			
	100	GORK		1051	1051.8		220.0			
	2800	OTTA	20	1305	1345	70	1.4	0.9		
	113	POTS	40	1347.4	1347.7	.4	200.0	10.0		
	29	UPIC		1347	1347.5	1				
	23	POTS	5	1347.7	1347.8	.4	30000.0U	1000.0U		
	2800	OTTA	20	1420	1446	60	1.8	0.9		
	2800	OTTA	20	1550	1700	100	1.4	0.7		
	7000	SAOP	32	1607.5		35.6	-26.3			
	2800	OTTA	20	1910	1940	130	2.2	1.1		
6	2000	TYKW	20	0130	0150	60	1.5	0.6		
	3750	TYKW	20	0131	0145	75	5.0	2.0		
	9400	TYKW	20	0140	0150	25	3.0	1.0		
	3750	TYKW	20	0305	0405	170	4.0	2.0		
	2000	TYKW	20	0305	0350	120	2.0	1.0		
	260	ONDR	41	0700	1218.5	423	20.0			
	7000	SAOP	32	1418.8		17	-11.4			
	7000	SAOP	20	1435.8		37 E	14.9			
	18	MCMA	41	1847	1851	10				
7	550	KIEV	6	1150.2	1150.6	.7	75.0		1	
	2800	OTTA	22	2038	2100	60	1.6	0.9		
8	408	TRST	5	1130.3	1130.3	.1	56.0	18.0		
	408	TRST	45	1155.1	1155.2	.4	62.0	9.0		
	18	MCMA	6	1325	1327	2			1	
9	260	ONDR	45	0734	0734	2	25.0			
	18	MCMA	6	1457	1459	3			1	
10	210	IZMI	6	0950.5	0951	3.5	145.0	100.0		
11	3750	TYKW	20	0130	0220	120	4.0	2.0		
	2000	TYKW	20	0200	0220	80	1.5	0.7		
	9400	TYKW	20	0210	0230	90	3.0	1.0		
	550	KIEV	6	0947.9	0948	1	65.0			
	550	KIEV	6	1038.7	1040	2.2	43.0			
	2695	PENT	20	2145	2227	120	2.0	1.0		
12	550	KIEV	6	0900	0900.4	1.2	41.0			
	18	MCMA	42	1539	1557	20			1	
	18	MCMA	42	1611	1614	11			1	
	18	MCMA	41	1631	1632	3			1	
	18	MCMA	41	1715	1728	14			1	
	4995	BOUL	3	2322	2323	2.5	8.0	2.0		
	1420	BOUL	3	2322	2323.5	2.5	2.0	1.0		
	2695	BOUL	3	2323	2324	2.5	4.0	1.0		
	2695	BOUL	3	2329.5	2330.5	3.5	4.0	1.0		
	2695	BOUL	3	2336.5	2338	4.5	5.0	2.0		
13	29	UPIC		0651	0654	4				
	260	ONDR	41	0700	1359.3	460	20.0			
	18	MCMA	6	1302	1303	3			1	
14	550	KIEV	6	0711.5	0711.9	1.1	38.0			
	550	KIEV	6	0940.5	0941.5	1.2	35.0			
	260	ONDR	45	1106.5	1107.5	3	100.0			
	1500	BERL	1	1107.8	1107.9	.4	3.4	1.1		

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	237	TRST	42	1107	1107.9	1.5D	300.0			
	234	POTS	40	1107.4	1108.	1.4	100.0	10.0		
	210	IZMI	41	1107	1107.5	2	70.0			
	200	GORK	41	1107.4	1108.1	1.6	70.0D			
	100	GORK	41	1107.5	1107.7	1.6	50.0			
	100	GORK		1107.5	1108.2		50.0			
	260	ONDR	45	1138.5	1138.5	7	20.0			
	2800	OTTA	2	1500	1502.9	6	5.8	2.0		
	2700	PENN	1	1500.9	1502.8	8.2	9.1	3.0		
	1420	BOUL	3	1500	1502.5	5.5	3.0	1.0		
	4995	BOUL	3	1501	1503.5	4.5	12.0	4.0		
	4995	CANR	3	1501.5	1504	6.5	13.0	4.0		
	2695	BOUL	3	1501	1503.5	5	7.0	2.0		
	2695	CANR	3	1501.5	1503.5	5.5	6.0	2.0		
	10700	PENN	20	1502.1	1504.3	25.9	8.7	4.4		
15	29	UPIC		1411.5	1412.5	3				
16	260	ONDR	41	0700	1001.5	460	15.0			
	550	KIEV	42	0940		115	37.0	28.0		
	2695	PENT	24	1955	2230	155	2.4	1.2		
17	260	ONDR	41	0650	0932.5	480	20.0			
	29	UPIC		1343	1345.5	4				
	18	MCMA	6	2219	2221	3			1	
18	210	IZMI	6	0728.3	0728.5	.4	240.0	180.0		
	221	ABST	6	0736	0736.2	.5	43.0			
	260	ONDR	45	0823.5	0824.5	1.5	15.0			
	29	UPIC		0825	0826	5				
	260	ONDR	45	1408	1411.5	39	20.0			
	4995	CANR	3	1810	1812.5	4	20.0	7.0		
	2695	CANR	3	1810.5	1813	4	15.0	5.0		
	1420	CANR	3	1811	1813	4.5	13.0	5.0		
19	4995	CANR	3	0736.5	0740	4.5	11.0	3.0		
	2695	CANR	3	0737	0739.5	4	4.0	1.0		
	1420	CANR	3	0737	0739.5	5	3.0	1.0		
	200	GORK	41	0848.9	0849.2	.6	150.0	35.0		
20	260	ONDR	5	1211	1211	1	15.0			
21	260	ONDR	45	1030	1030	2	20.0			
	260	ONDR	45	1253	1254	1	20.0			
22	260	ONDR	41	1040	1313	170	20.0			
	18	BOUL	41	1303	1306	6			1	
	18	BOUL	41	1314	1315	4			1	
	18	BOUL	6	1418	1419	2			1	
	18	BOUL	41	1425	1438	15			3	
	245	BOUL	42	1503	1635	92			2	
	4995	CANR	3	1742.5	1744	4	10.0	3.0		
	1420	CANR	3	1742.5	1744	3.5	4.0	1.0		
	2695	CANR	3	1743	1744.5	3.5	6.0	2.0		
	1420	CANR	3	1756.5	1758	3.5	4.0	1.0		
	9400	HUAN	20	1858.1	2002.7U	85.8	11.9U	4.6		
	2800	OTTA	24	2020	2040	20	1.4	0.7		
23	260	ONDR	44	0700	1055.5	470	30.0			
	100	GORK	6	0705.4	0705.5	.3	40.0	20.0		
	315	DWIN	43	0833	1118	287	55.0	30.0		
	283	DWIN	43	0855	1107	268	100.0D	35.0		
	100	GORK	6	0857.8	0858	.6	35.0			
	100	GORK	41	1020.4	1021.4	4.3	40.0			
	100	GORK		1020.4	1024.2		25.0			
	100	GORK	6	1028.7	1029	.8	40.0D			
	536	ONDR	41	1050	1253.5	145	60.0			
	410	SGMR	44	1110 E	1502.2	634 D	9.8			
	245	SGMR	44	1110 E	1509.6	634 D	127.0			
	100	GORK	6	1130.8	1130.9	.9	40.0			
	100	GORK	41	1208.2	1208.6	2.3	50.0			
	100	GORK		1208.2	1210		50.0D			
	283	DWIN	43	1425		60 D	75.0	30.0		
	245	BOUL	42	1427	1501	65				
	315	DWIN	43	1457	1514	97	40.0	25.0	1	
	237	TRST	42	1459	1459.7	2.7	52.0			
	237	TRST	42	1509.5	1509.7	3	360.0			
	2800	OTTA	23	1515	1535	70	1.4	0.7		
	10700	PENN	3	1534.4	1534.6	4	16.2	1.8		
	9400	HUAN	1	1534.3	1534.5	.4	20.4	7.8		
	8800	SGMR	3	1534.4	1534.6	.6	29.5	8.9		
	7000	SAOP	8	1534.5		.7	25.4			
	4995	SGMR	3	1534.4	1534.5	.7	15.2	4.6		
	2800	OTTA	1	1534	1534.5	1	9.0	3.0		
	2700	PENN	3	1534.2	1534.5	2.2	13.3	1.2		
	2695	SGMR	1	1534.4	1534.6	1.7	8.6	2.6		
	2695	BOUL	8	1534.5	1535	1	12.0	5.0		
	1415	SGMR	1	1534.4	1534.5	1.6	1.7	.5		
	960	PENN	1	1534.2	1534.5	1	3.6	0.8		
	606	SGMR	1	1534.4	1534.6	.6	6.5	1.9		

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	2700	PENN	8	1917.9	1918	.5	4.8			
	960	PENN	8	1918	1918.2	.4	148.0			
	2700	PENN	40	1956.1		3.2				
	960	PENN	45	1956.1	1957.7	3.2	22.9	2.4		
	2800	OTTA	24	2045	2210	85	2.2	1.1		
	2700	PENN	8	2057.9	2058.1	.3	14.5			
	960	PENN	41	2057	2058.2	3.2	66.5			
	100	HIRA	45	2126	2126.6	1.5	600.0	200.0		
	245	BOUL	42	2143	2210	60			1	
	2695	CRON	8	2309.5	2310	2	12.0	4.0		
	100	HIRA	45	2343	2343.3	1	330.0	80.0		
	100	HIRA	45	2353.1	2353.4	1	350.0	70.0		
24	2695	CRON	3	0036	0037	2	6.0	2.0		
	1420	CRON	45	0036.5	0038.5	2.5	8.0	3.0		
	500	HIRA	45	0036.5	0038.5	2.5	380.0	60.0		
	9400	TYKW	3	0037	0038	4	6.0	3.0		
	4995	MANI	2	0037.1	0038.5	2.9	4.6	1.8		
	3750	TYKW	1	0037	0038.3	3	5.0	2.0		
	2695	MANI	2	0037.1	0038.5	2	7.1	1.6		
	2000	TYKW	45	0037	0038.3	4	8.0	2.0		
	1415	MANI	2	0037.1	0038.5	1.9	6.9	1.5		
	1000	TYKW	45	0037	0038.4	3	7.0	2.0		
	606	MANI	46	0037.1	0038.4	1.9	20.9	4.1		
	100	HIRA	45	0037.7	0038.4	2	450.0	100.0		
	3750	TYKW	29	0040		60	2.0	1.0		
	260	ONDR	44	0700	1228	460	30.0			
	550	KIEV	6	0736	0737.1	2.2	57.0			
	100	GORK	44	0842.8		78 D		5.0		
	283	DWIN	43	0855	0917	60	75.0	30.0		
	221	ABST	6	0911.8	0912	.5	28.0			
	100	GORK	6	0927.6	0929.1	2.5	40.0			
	550	KIEV	6	0954.7	0955.2	3	252.0			
	536	ONDR	41	0957	1050	153	70.0			
	550	KIEV	6	1049.7	1050.1	1.1	68.0			
	2800	OTTA	20	1345	1427	90	1.6	0.8		
	2800	OTTA	27	1515		155	2.6	1.7		
	2800	OTTA	24	1815	1905	50	2.2	1.1		
	2700	PENN	8	1858.3	1858.4	.2	9.8			
	960	PENN	45	1858.3	1858.7	2.4	21.2	1.1		
	2695	PENT	40	2006.4	2007.1	1.6	6.0			
25	260	ONDR	44	0710	1124	450	220.0			
	245	SGMR	44	1113 E	1831	629 D	25.2			
	315	DWIN	43	1315		160 D		30.0		
	283	DWIN	43	1315		160 D		35.0		
	550	KIEV	6	0722.2	0722.5	1.7	51.0			
	100	GORK	41	1035.5	1035.8	2.1	50.0D			
	100	GORK		1035.5	1037.1		30.0			
	100	GORK	6	1041.2	1041.5	8	50.0D			
	536	ONDR	45	1123	1125	4	75.0			
	315	DWIN	45	1123	1124	3	400.0	70.0		
	283	DWIN	45	1123		3	100.0D			
	260	ONDR	45	1123.5	1124	3.5	220.0			
	9500	BERL	2	1124.5	1125.2	3	10.0	3.8		
	9100	GORK	1	1124.9	1125.2	1.5	13.6	6.8		
	4995	CANR	8	1124	1125	3	13.0	5.0		
	3000	BERL	4	1124.7	1125.4	2.8	10.0	3.7		
	1500	BERL	4	1124	1125.5	3.5	18.0	4.9		
	930	BORD	45	1124	1125.5	3	28.0	3.0		
	808	ONDR	45	1124.5	1125.5	3	90.0			
	606	SGMR	4	1124.7	1125.5	2.6	34.8	10.4		
	510	POTS	45	1124 U	1125 U	3.5U	30.0	6.0		
	410	SGMR	6	1124.7	1125.3	1.3	19.7	3.9		
	408	TRST	45	1124.1	1125	3.1	42.0	12.0		
	245	SGMR	6	1124.3	1124.5	1.9	115.0	23.0		
	234	POTS	45	1124.1	1124.3	1.8	800.0	100.0		
	210	IZMI	48	1124	1124.1	.8	1480.0	1000.0		
	210	IZMI	48	1124.8	1124.9	1.5	1000.0	700.0		
	113	POTS	45	1124.2	1124.3	3	2000.0	300.0		
	29	UPIC		1124.5		5.5				
	23	POTS	45	1124.1	1125.1	3.6	50000.0	8000.0		
	3100	CRIM	1	1125	1126	4	9.0	3.0		
	2695	CANR	8	1125	1126	2.5	17.0	6.0		
	1420	CANR	8	1125	1126	3	18.0	7.0		
	315	DWIN	29	1126		19		5.0		
	283	DWIN	29	1126		37		5.0		
	234	POTS	45	1144	1144.1	.1	175.0	20.0		
	550	KIEV	6	1324	1325.2	2.2	263.0			
	2800	OTTA	24	1350	1505	75	2.6	1.3		
	2700	PENN	1	1551.6	1552.7	3.2	2.4	0.6		
	2800	OTTA	21	1552	1617	60	1.6	0.8		
	2800	OTTA	1	1552.2	1552.7	1	1.4	0.7		
	1415	SGMR	1	1552.6	1552.7	.3	7.1	2.1		
	960	PENN	1	1552.4	1552.7	2.4	4.6	0.8		
	606	SGMR	3	1552.6	1552.7	.4	17.0	5.1		
	410	SGMR	6	1552.6	1552.7	.7	19.2	5.8		
	315	DWIN	45	1552	1552.5	1	200.0	20.0		
	245	SGMR	48	1552.6	1552.7	.7	545.0	163.5		
	606	SGMR	1	1915.5	1915.9	.8	2.8	.9		

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	410	SGMR	6	1915.6	1915.7	.4	2.5	.7		
	245	SGMR	6	1915.6	1915.7	.7	5.4	1.6		
	200	HIRA	45	2329.5	2331.6	4	180.0D	60.0D		
	100	HIRA	45	2330	2331.5	4	1000.0	100.0		
26	100	GORK	44	0700 E		420 D		5.0		
	260	ONDR	41	0740	1232	300	70.0			
	283	DWIN	41	0723		8	100.0D			
	315	DWIN	41	0724	0726	7	100.0	5.0		
	210	IZMI	41	0725.5	0730.3	7.5	160.0			
	113	POTS	41	0725	0730.9	7.7	150.0	10.0		
	100	GORK	41	0725.4	0725.4	7.4	30.0D			
	100	GORK		0725.4	0727.3		30.0D			
	100	GORK		0725.4	0731		65.0			
	221	ABST	6	0726.8	0727	.5	56.0			
	234	POTS	41	0727.4	0730.8	5	200.0	10.0		
	200	GORK	41	0727.1	0727.5	5.4	15.0			
	200	GORK		0727.1	0731		100.0			
	200	HIRA	45	0729.5	0731 U	3.5	100.0D	40.0D		
	100	HIRA	45	0729.5	0731	3.5	100.0	20.0		
	1500	BERL	4	0730	0730.5	1	10.0	2.5		
	221	ABST	48	0730	0730.2	1	71.0	10.0		
	221	ABST	6	0731.8	0732	.5	71.0			
	100	GORK	6	0739	0744.1	7	25.0			
	113	POTS	45	0743.2	0744	1.2	280.0	30.0		
	210	IZMI	6	0744.1	0744.2	.3	26.0	15.0		
	200	GORK	6	0745	0745.4	.8	25.0			
	606	MANI	40	0814.5	0821.2	12.3	17.6	6.3		
	100	GORK	6	0831.3	0831.5	1	30.0D			
	315	DWIN	45	0836	0837	2	20.0	4.0		
	283	DWIN	45	0836	0837	2	15.0	3.0		
	210	IZMI	6	0838.3	0838.7	1.7	70.0	35.0		
	200	GORK	6	0838.2	0838.8	1.9	150.0			
	113	POTS	45	0838.3	0838.6	1.2	800.0	150.0		
	100	GORK	6	0838.4	0838.5	2.1	30.0D			
	29	UPIC		0838.5	0839.5	2				
	23	POTS	45	0838.3	0839.3	2	8000.0	1000.0		
	550	KIEV	41	0950.5	0952.4	3	56.0			
	283	DWIN	41	1227		6	100.0D			
	315	DWIN	41	1228	1232	10	60.0	3.0		
	237	TRST	42	1229.5	1229.8	5.1	43.0			
	237	TRST		1229.5	1232.2		290.0			
	237	TRST		1229.5	1233.7		81.0			
	234	POTS	41	1229.7	1232.2	4.1	250.0	5.0		
	200	GORK	41	1229.7	1230	4.4	80.0			
	200	GORK		1229.7	1233.6		250.0			
	113	POTS	40	1229.7	1232.2	4.1	280.0	7.0		
	100	GORK	41	1229.7	1230	6.9	30.0D			
	100	GORK		1229.7	1236.2		2-.0			
	536	ONDR	45	1232	1233.5	6	40.0			
	410	SGMR	6	1232.2	1233.5	1.7	12.6	3.8		
	245	SGMR	6	1232.2	1232.5	1.8	65.4	19.6		
	930	BORD	41	1233	1233.3	1	10.0	2.0		
	606	SGMR	1	1233.1	1233.5	.9	3.1	.9		
	200	GORK	6	1241.1	1241.5	.8	50.0			
	100	GORK	6	1241.1	1241.5	.7	10.0	5.0		
	100	GORK	6	1255.1	1255.3	.8	30.0D	10.0		
	245	SGMR	6	1614.2	1621.1	10.8	98.1	19.6		
	2700	PENN	8	1616.7	1617.2	.8	7.3			
	2800	OTTA	8	1617.2	1617.2		4.2			
	18	MCMA	6	1618	1620	2			1	
	18	MCMA	6	1931	1932	3			1	
	245	SGMR	7	2045	2049.1	9.6	255.0	51.0		
	410	SGMR	6	2048.3	2048.9	3.8	15.0	3.0		
	2800	OTTA	8	2050.8	2050.8	.5	2.0	0.9		
	2695	PENT	24	2135	2152	17	2.8	1.2		
	245	BOUL	42	2237	2310	37			2	
27	9750	IRKU	3	0458	0503.6	12	72.0	7.5		
	4995	CRON	8	0502.5	0503.5	2	39.0	16.0		
	9400	TYKW	3	0503.5	0503.9	3	48.0	10.0		
	8800	MANI	4	0503.3	0503.8	3	66.0	14.6		
	4995	MANI	4	0503.3	0503.8	3	48.2	9.1		
	3750	TYKW	3	0503.5	0503.8	1.5	33.0	8.0		
	2695	MANI	4	0503.3	0503.7	1.4	24.3	5.7		
	2695	CRON	8	0503	0503.5	1.5	21.0	8.0		
	2000	TYKW	3	0503.5	0503.9	1.5	46.0	9.0		
	1420	CRON	8	0503.5	0504	1	8.0	3.0		
	1415	MANI	1	0503.3	0503.8	3	8.7	2.0		
	1000	TYKW	1	0503.5	0503.9	1	6.0	2.0		
	8800	ATHN	3	0504.1	0504.7	1 U	39.0	15.6U		
	4995	ATHN	3	0504.2	0504.7	1 U	28.4	10.5U		
	2695	ATHN	3	0504.2	0504.7	2 U	19.2	6.4U		
	1415	ATHN	1	0504.4	0504.6	1 U	9.9	3.1U		
	3750	TYKW	29	0505		20	2.0	1.0		
	200	GORK	6	0508.5	0508.8	1	200.0			
	260	ONDR	41	0720	1018	400	40.0			
	100	GORK	44	1100		60 D		5.0		
	930	BORD	5	1401	1401.2	1	16.0	1.0		
	2700	PENN	45	1517.8	1601.5	49.1	81.2	16.2		

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OCT. 1973	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	2800	OTTA	21	1533	1550	450 D	6.2			
	960	PENN	28	1533.4	1556.3	33.7	60.3	9.8		
	2695	BOUL	45	1540	1601.5	142	55.0	12.0		
	2695	CANR	45	1540.5	1602	118.5	69.0	16.0		
	1420	BOUL	45	1541.5	1502	72	48.0	14.0		
	2695	SGMR	46	1544.5	1601.5	96	62.0	12.7		
	2695	SGMR	46		1617.1		63.6			
	1415	SGMR	46	1544	1559.5	60.9	71.7	17.8		
	1415	SGMR	46		1601.6		89.1			
	4995	SGMR	22	1546.5	1601.6	93.9	30.0	18.0		
	1420	CANR	45	1546.5	1601.5	55.5	66.0	17.0		
	606	SGMR	46	1546.8	1555.9	52.7	153.2	33.0		
	606	SGMR	46		1601.8		11.7			
	606	SGMR	46		1621.2		164.9			
	606	SGMR	46		1736		39.0			
	410	SGMR	6	1546	1551.5	60.3	89.3	12.8		
	410	SGMR	6		1601.8		13.0			
	10700	PENN	20	1547.7	1617.7	139	28.8	11.3		
	245	SGMR	6	1548.3	1601.8	54.5	8.0	2.5		
	245	SGMR	6		1611.7		14.3			
	8800	SGMR	22	1549	1602.3	62.8	20.2	12.1		
	930	BORD	45	1549	1624.2	46	403.0	76.0		
	9400	HUAN	20	1551.3	1623.3U	129.9	27.3U	12.8		
	4995	BOUL	45	1552	1558	58	37.0	9.0		
	7000	SAOP	22	1553 U		51 E	37.9			
	4995	CANR	45	1553.5	1600.5	70	24.0	8.0		
	2800	OTTA	46	1554	1601.5	36	55.0	24.5		
	2800	OTTA		1554	1601.5	13	55.0			
	2800	OTTA		1607	1618.5	23	34.0			
	15400	SGMR	20	1555	1602.2	55.3	14.2	8.3		
	2700	PENN	29	1606.9	1606.9	323	24.2	12.1		
	2700	PENN	45	1606.9	1617.1	24.5	339.0	14.2		
	960	PENN	45	1607.1	1624.6	23.9	212.0	68.0		
	960	PENN	29	1607.1	1607.1	283	11.2	5.6		
	2800	OTTA	29	1630	1630	55	10.6	5.2		
	606	SGMR	46	1639.5	1659.2	87.7	64.8	19.5		
	960	PENN	1	1641.4	1643.6	5.8	7.1	1.5		
	960	PENN	1	1654.5	1656	3	8.7	2.2		
	1415	SGMR	20	1657.2	1703.3	50.1	2.0	1.2		
	960	PENN	45	1657.9	1700.1	8.9	60.3	16.3		
	960	PENN	3	1708.5	1710.6	4.4	10.9	3.0		
	410	SGMR	6	1717.7	1736	50.1	12.6	7.6		
	2695	BOUL	3	1814.5	1817.5	8.5	4.0	1.0		
	606	SGMR	22	1826.3	1836.8	24.4	68.3	17.0		
	1420	BOUL	3	1833.5	1835.5	4	2.0	1.0		
	410	SGMR	6	1834.3	1841.3	15.7	2.8	1.4		
	18	MCMA	41	1926	1928	5			1	
	245	BOUL	42	2221	2240	75			2	
28	100	GORK	44	0700		300 D		5.0		
	200	GORK	44	1000		120 D		5.0		
	245	SGMR	44	1117 E	1846	620 D	639.0			
	260	ONDR	44	1130	1237	150	25.0			
	245	BOUL	44	1709 E		398 D			3	
	410	SGMR	43	1711.3	1857.4	265.7D	31.7			
	200	HIRA	44	2050 E	0136	670 D	210.0	100.0		
	100	HIRA	44	2050 E	0351	670 D	700.0	140.0U		
	260	ONDR	41	0720	0819.5	228	20.0			
	200	GORK	6	0815.8	0816	.5	90.0			
	113	POTS	40	0815.6	0817.6	3	200.0	25.0		
	100	GORK	6	0816.7	0818 U	2.5	50.0D			
	4995	CANR	3	0847.5	0853	30	24.0	6.0		
	4995	CRON	3	0850	0852.5	5.5	14.0	4.0		
	3000	BERL	20	0850	0858.4	25	3.2			
	10500	BERN	8	0851.3	0853	12	20.0			
	9500	BERL	3	0851.7	0857.9	18	15.0	3.8		
	9100	GORK	1	0853.1	0853.6	1.8	18.6	9.3		
	113	POTS	40	0905.5	0906	.5	100.0	5.0		
	100	GORK	6	0905.7	0906.2	.8	50.0	20.0		
	3000	BERL	46	0946	0948.5	39	23.0			
	9500	BERL	3	0947	0948.5	21	30.0			
	1500	BERL	46	0947	0948.5	34	59.0			
	510	POTS	41	0947.7	0948.5	7.3	38.0	3.0		
	237	TRST	42	0947.7	0948.6	5.4	2500.0			
	237	TRST			0952.2		190.0			
	234	POTS	41	0947.8	0948.6	5.1	1800.0	40.0		
	210	IZMI	48	0947.7	0948	3.3	2190.0	1800.0		
	113	POTS	41	0947.8	0948	5.4	50000.0	400.0		
	10500	BERN	8	0948.1	0948.6	2	44.0			
	9100	GORK	1	0948.8	0949	1.4	39.0	19.4		
	4995	CANR	45	0948	0949	6	44.0	16.0		
	4995	CRON	45	0948	0949	5.5	56.0	16.0		
	1420	CANR	45	0948.5	0948.5	7	52.0	14.0		
	950	GORK	46	0948.5	0950.2	5.8	28.0			
	950	GORK		0948.5	0954.5		20.0			
	930	BORD	45	0948	0949.8	7	37.0	6.0		
	650	GORK	46	0948.8	0949	7.4	19.0			
	650	GORK		0948.8	0952.6		36.0			
	536	ONDR	45	0948.5	0952.5	7.5	80.0			
	408	TRST	42	0948	0948.6	9.5	200.0D			

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	408	TRST			0952.6		110.0			
	260	ONDR	44	0948	0948.5	102	240.0D			
	200	GORK	41	0948	0948.2	5.3	300.0D			
	200	GORK		0948	0949		700.0			
	100	GORK	49	0948	0949 U	39	8000.0D			
	100	GORK	48	0948	0949 U	11.2	8000.0D			
	100	GORK		0948	0958.9		900.0			
	29	UPIC		0948		7				
	2695	CANR	45	0949	0949.5	14.5	37.0	12.0		
	1420	CRON	45	0949	0949	7.5	48.0	11.0		
	808	ONDR	45	0949	0953	8	90.0			
	210	IZMI	6	0951	0952	2.4	160.0	100.0		
	100	GORK	49	0959.1	1030.4	27.1	100.0	50.0		
	100	GORK	6	1028.2	1028.4	.4	50.0	20.0		
	237	TRST	41	1036.4	1036.6	.7	60.0			
	237	TRST	41	1046.6	1046.7	.7	52.0			
	245	SGMR	48	1829.8	1830.2	1.2	1152.0	230.0		
	2800	OTTA	20	1915	1917	15	.8	0.4		
	2695	CRON	45	2347	2348	5.5	29.0	9.0		
29	500	HIRA	5	0216.6	0217	1.5	10.0	5.0		
	4995	MANI	40	0427.1	0445.6	23.1	12.9	2.0		
	3750	TYKW	3	0444.6	0445.5	1.5	10.0	3.0		
	200	GORK	44	0500 E		480 D		10.0		
	100	GORK	44	0500 E		480 D		15.0		
	234	POTS	45	0648.9	0649	.1	130.0	35.0		
	210	IZMI	44	0700		300	70.0			
	260	ONDR	44	0710	0833.5	440	100.0			
	410	SGMR	44	1118 E	1505.1	618 D	13.3			
	245	SGMR	44	1118 E	1525.2	618 D	58.8			
	245	BOUL	44	1331 E		223 D			2	
	200	HIRA	44	2105 E	0557	660 D	95.0	20.0		
	100	GORK	6	0751.9	0752.6	1.8	1500.0	700.0		
	234	POTS	40	0832.9	0833.9	1.3	350.0	15.0		
	100	GORK	41	0933.8	0935	16.2	200.0			
	100	GORK		0933.8	0940		300.0			
	100	GORK		0933.8	0943.1		300.0			
	100	GORK		0933.8	0947.3		300.0			
	100	GORK	6	0951.4	0951.9	1	350.0	170.0		
	234	POTS	45	1031.4	1031.6	.4	120.0	20.0		
	113	POTS	40	1051.4	1051.8	.6	800.0	40.0		
	100	GORK	41	1142.5	1143.2	7.4	400.0			
	100	GORK		1142.5	1148.7		400.0			
	4995	CANR	3	1146	1146.5	2.5	7.0	3.0		
	408	TRST	41	1146.6	1146.9	.5D	30.0			
	18	MCMA	6	1335	1338	4			1	
	237	TRST	42	1513	1515.7	4.3	190.0			
	245	BOUL	41	2150	2156	15			2	
	245	BOUL	41	2253	2256	6			2	
	245	BOUL	41	2301	2302	9			2	
	245	BOUL	41	2327	2343	16 D			2	
	2695	CRON	8	2339.5	2340	2	7.0	3.0		
30	200	HIRA	45	0103	0103.3U	1.5	180.0D	100.0D		
	100	HIRA	45	0103	0103.5	1.5	220.0	70.0		
	3750	TYKW	45	0114	0118.7	15	5.0	2.0		
	1415	MANI	1	0115.3	0118.6	4.2	7.8	2.0		
	606	MANI	4	0115.3	0118.6	4.2	15.0	4.4		
	4995	MANI	1	0116.2	0118.6	5	4.9	1.9		
	4995	CRON	3	0116.5	0117.5	4	8.0	3.0		
	9400	TYKW	3	0117	0118.6	4	12.0	4.0		
	8800	MANI	1	0117.1	0118.6	4.1	9.0	3.0		
	2695	MANI	4	0117.9	0118.6	1.6	11.6	3.9		
	2000	TYKW	45	0117	0118.8	3	4.0	1.0		
	1000	TYKW	45	0117	0118.7	3	13.0	2.0		
	2695	CRON	8	0126.5	0127.5	2	12.0	4.0		
	100	HIRA	43	0220	0556	320 D	170.0D	40.0D		
	200	GORK	44	0509 E		291		20.0		
	100	GORK	44	0580 E		216		20.0		
	260	ONDR	44	0700	1133.5	460	140.0			
	100	GORK	44	0844		241 D		5.0		
	210	IZMI	44	0900		180	50.0			
	200	GORK	44	1000		180		5.0		
	410	SGMR	44	1119 E	1539.6	328.6D	151.0			
	245	SGMR	44	1119 E	1526.4	616 D	338.0			
	2000	TYKW	1	0234	0236	10	2.0	1.0		
	2000	TYKW	45	0440	0455.3	50	3.0	1.0		
	1000	TYKW	45	0440	0455	50	3.0	1.0		
	9400	TYKW	3	0452	0455	8 D	5.0	2.0		
	3750	TYKW	45	0452	0458	10	4.0	2.0		
	9750	IRKU	1	0504.5	0504.9	.5	4.0			
	200	GORK	6	0847	0847.6	1.3	300.0	150.0		
	200	GORK	6	0902.8	0903.1	1.3	250.0	100.0		
	200	GORK	6	0957.8	0958	1.1	240.0	100.0		
	408	TRST	45	1133.5U	1134	.5D	21.0			
	237	TRST	41	1133.5	1133.5	.6D	600.0			
	234	POTS	45	1133.5	1133.5	.7	350.0	35.0		
	113	POTS	45	1133.5	1134.1	.9	140.0	4.0		
	113	POTS	45	1145.6	1145.8	.7	280.0	30.0		
	234	POTS	45	1336	1447	86 D	175.0			

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	113	POTS	45	1336	1501	86 D	280.0			
	245	BOUL	43	1337		606 D			3	
	2800	OTTA	21	1420	1530	295	6.8	4.0		
	4995	SGMR	22	1424.7	1546.9	265.3	11.9	7.1		
	2700	PENN	20	1425.6	1700	424	3.3	0.7		
	10700	PENN	20	1426.8	1627.4	423	16.7	3.0		
	1420	CANR	40	1426	1541	116.5	16.0	2.0		
	2695	SGMR	22	1436.9	1539.8	259.1	7.6	4.6		
	930	BORD	40	1437	1516.6	94	34.0	4.0		
	606	SGMR	43	1437.9	1539.3	104.4	40.7			
	2800	OTTA	40	1440		65	2.8			
	18	MCMA	6	1440	1442	3			1	
	2695	CANR	3	1445	1447.5	5.5	3.0	1.0		
	4995	BOUL	20	1507	1620	23.5	11.0	4.0		
	1415	SGMR	40	1507.7	1540.5	79.3	19.5	7.8		
	1420	BOUL	40	1508.5	1640.5	67.5	19.0	3.0		
	2695	CANR	40	1518	1540	27	6.0	2.0		
	2695	BOUL	40	1518	1540	26	6.0	2.0		
	1420	CANR	3	1641.5	1642.5	2.5	6.0	2.0		
	1420	BOUL	3	1641.5	1642	2.5	4.0	1.0		
	1420	BOUL	8	1653.5	1654.5	1.5	15.0	6.0		
	2800	OTTA	26	1915	1915	150	4.2	2.1		
31	100	HIRA	45	0435	0435.9	2	280.0	60.0		
	200	GORK	44	0500		480		5.0		
	100	GORK	44	0503		207		5.0		
	260	ONDR	44	0720	1306.5	430	55.0			
	283	DWIN	44	0930		510		30.0		
	100	GORK	44	1048		132		5.0		
	410	SGMR	44	1120 E	1231.7	170 D	2.1			
	245	SGMR	44	1120 E	2048.2	613 D	117.5			
	245	BOUL	44	1344	1432	124			2	
	245	BOUL	42	1703	1747	145			2	
	200	GORK	41	0511	0511.1	2	200.0			
	200	GORK		0511	0512.8		100.0			
	200	GORK	6	0543.4	0543.6	.4	240.0	120.0		
	200	GORK	41	0606.4	0607	3	250.0			
	200	GORK		0606.4	0608.8		300.0			
	200	GORK	41	0628.4	0629.5	9.2	300.0			
	200	GORK		0628.4	0631.3		300.0			
	200	GORK		0628.4	0634.3		300.0			
	200	GORK	41	0659.6	0700	5	300.0			
	200	GORK		0659.6	0703.6		350.0			
	100	GORK	6	0659.7	0705	1.8	40.0	20.0		
	200	GORK	41	0712.6	0713.7	3.4	35.0			
	200	GORK		0712.6	0715		35.0			
	4995	CANR	3	0744	0745	1.5	10.0	3.0		
	1420	CANR	3	0744.5	0745	1.5	3.0	1.0		
	2695	CANR	3	0745	0745.5	1.5	5.0	2.0		
	4995	CANR	3	0753	0754	1.5	6.0	2.0		
	2695	CANR	3	0753.5	0754	2.5	3.0	1.0		
	1420	CANR	3	0753	0753.5	2	2.0	1.0		
	100	GORK	48	0834.4	0835.4	1.4	45.0			
	200	GORK	6	1034.2	1034.5	1.2	350.0			
	234	POTS	41	1222.6	1226.4	4.1	175.0	2.0		
	2695	CANR	1	1301	1301.5	5	2.0	1.0		
	18	MCMA	6	1357	1358	2			1	
	4995	CANR	3	1436.5	1440	6	8.0	3.0		
	2800	OTTA	20	1437	1439	15	1.8	0.9		
	2695	CANR	3	1438	1440	4.5	4.0	1.0		
	234	POTS	45	1440	1440.2	.5	200.0	50.0		
	2800	OTTA	21	1948	2010	122	5.4	2.6		
	2800	OTTA	1	1958	2003	8.2	4.8	2.4		
	2700	PENN	20	1958.2	2003	50.4	8.2	4.1		
	1420	BOUL	3	1959.5	2002	10	2.0	1.0		
	2695	BOUL	3	2000	2003	6.5	6.0	2.0		
	245	BOUL	42	2032	2058	150			1	

Observatories:

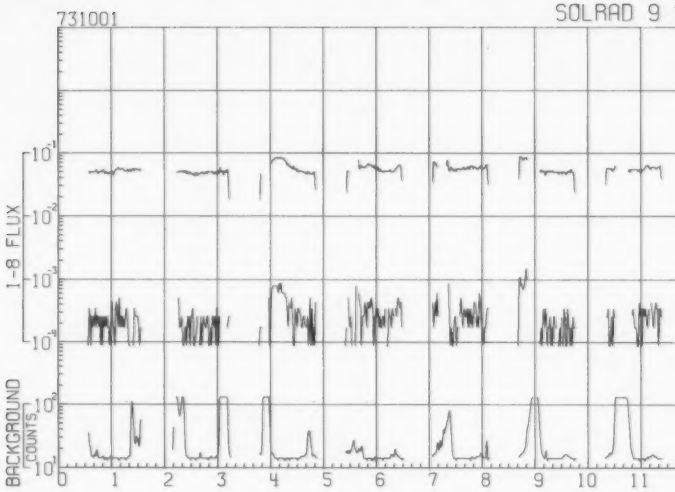
ABST = Abastumani
BERL = Berlin-Adlershof
BERN = Berne
DWIN = Dwingeloo
BOUL = Boulder
CANR = Canary Islands
CRIM = Simferopol
CRON = Carnarvon
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = Moscow IZMIRAN
KIEV = Kiev
MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa ARO
PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SLOU = Slough
TRST = Trieste
TYKW = Toyokawa
UPIC = Upice
VORO = Voroshilov

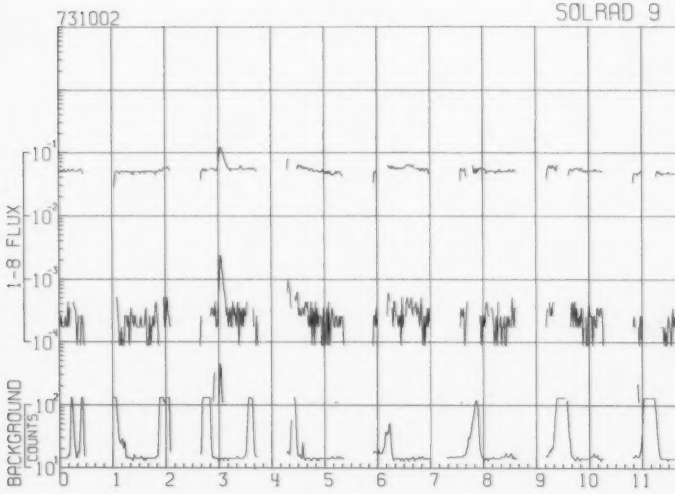
Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

SOLAR X-RAYS MEASURED BY SA

OCTO



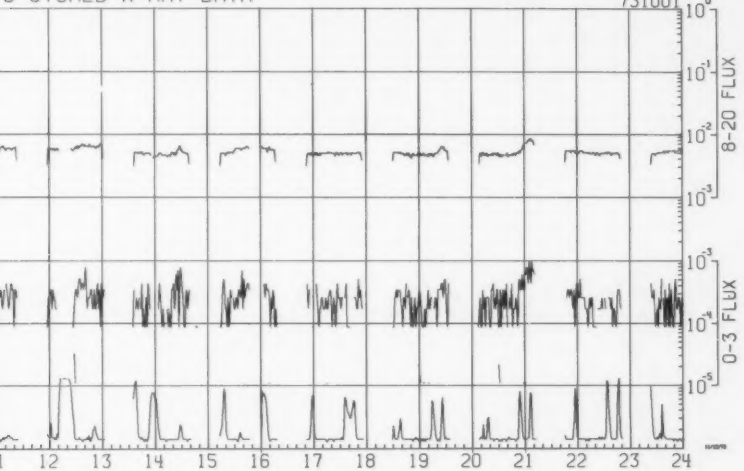


ATELLITE SOLRAD 9 - EXPLORER 37

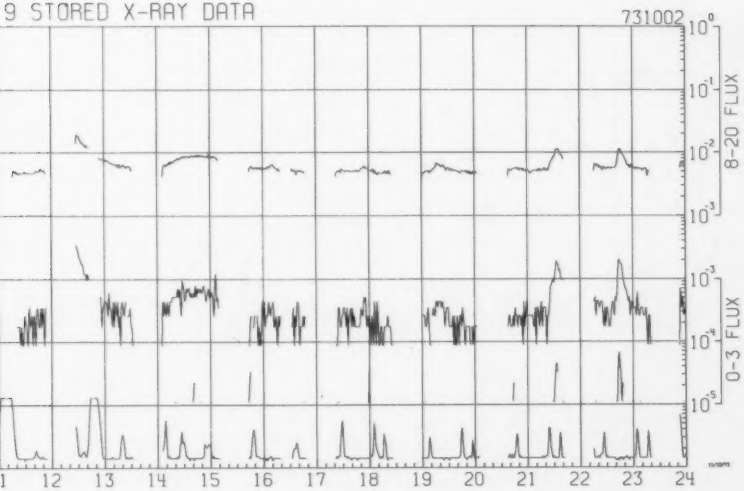
TOBER 1973

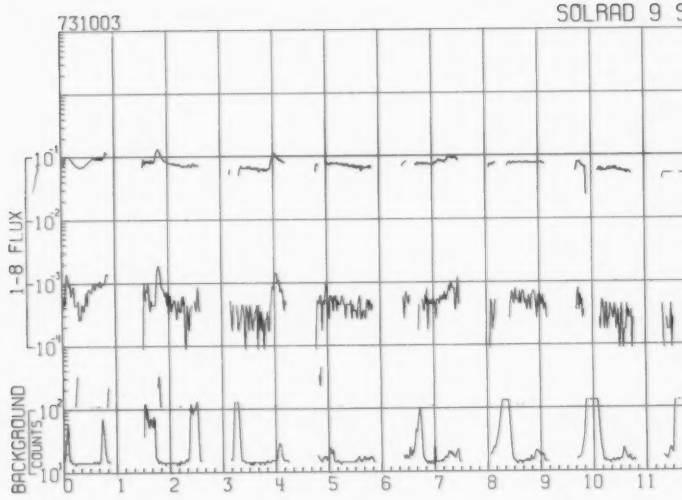
24 Oct 73

9 STORED X-RAY DATA 731001



9 STORED X-RAY DATA 731002

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1-8 FLUX
BACKGROUND
COUNTS
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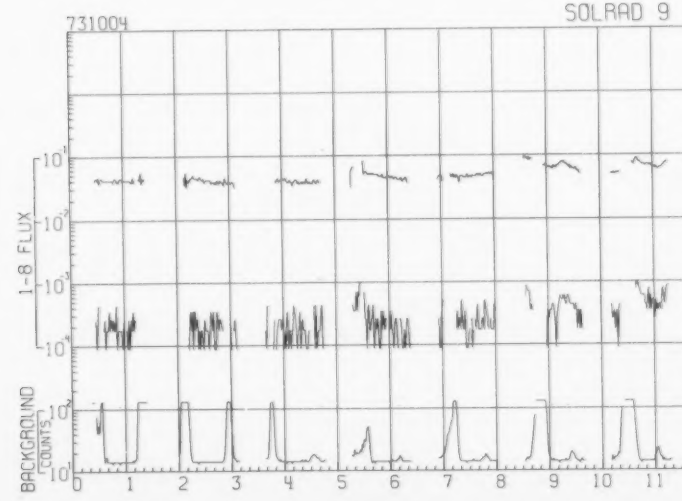
731004
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1-8 FLUX
BACKGROUND
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9 STORED X-RAY DATA

731003

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA

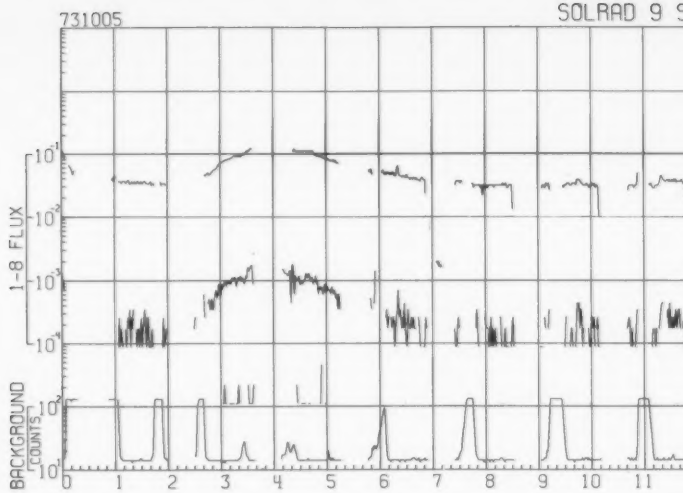
731004

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

25
Oct 73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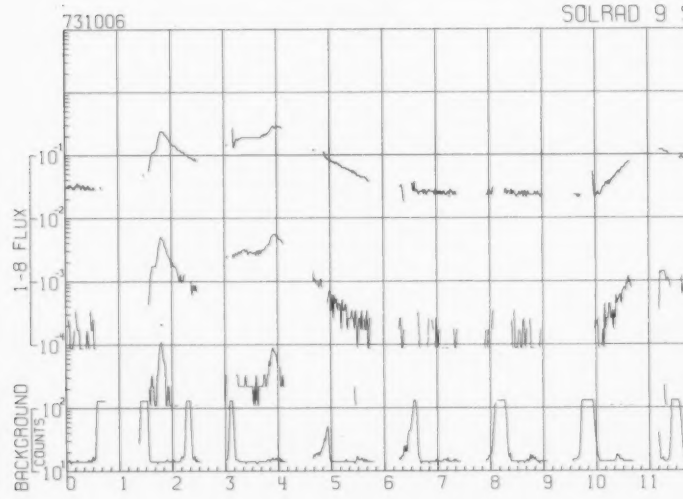

731006
SOLRAD 9
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

26
Oct 73

9 STORED X-RAY DATA

731005

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

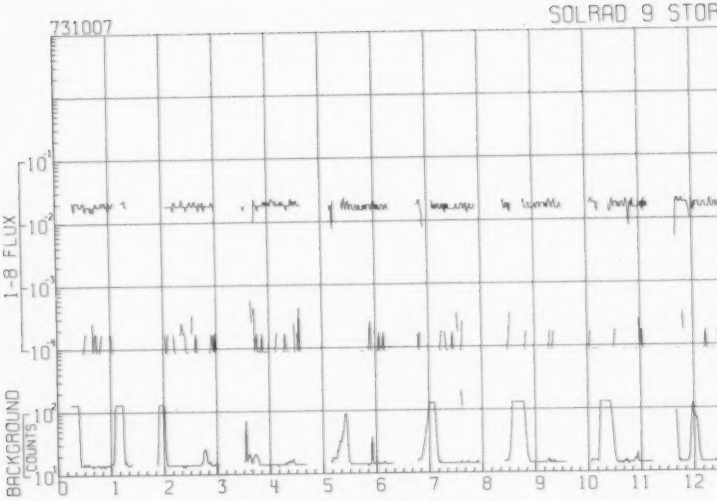
9 STORED X-RAY DATA

731006

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24


731007
SOLRAD 9 STOR
1-8 FLUX
BACKGROUND COUNTS
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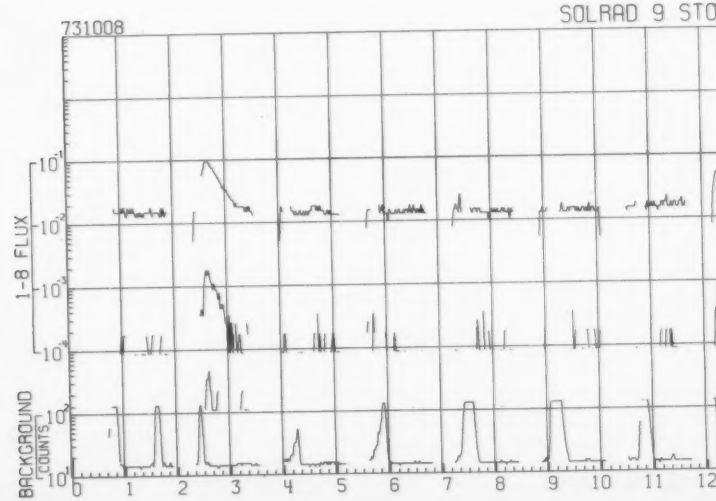

731008
SOLRAD 9 STO
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11 12

TORED X-RAY DATA

731007

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

STORED X-RAY DATA

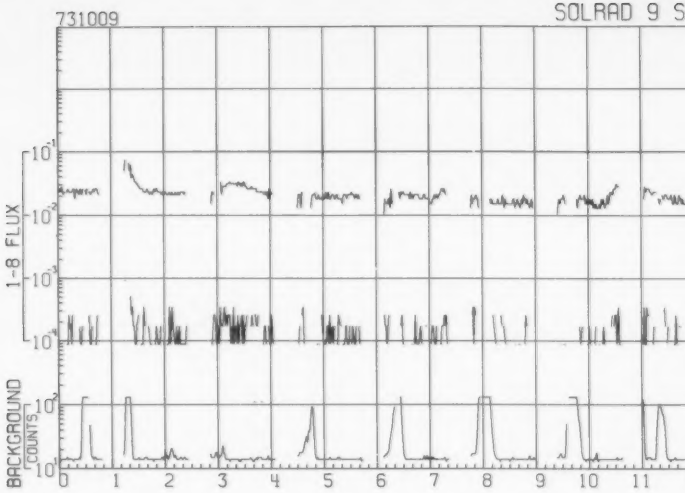
731008

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

27
Oct 73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BACKGROUND
COUNTS
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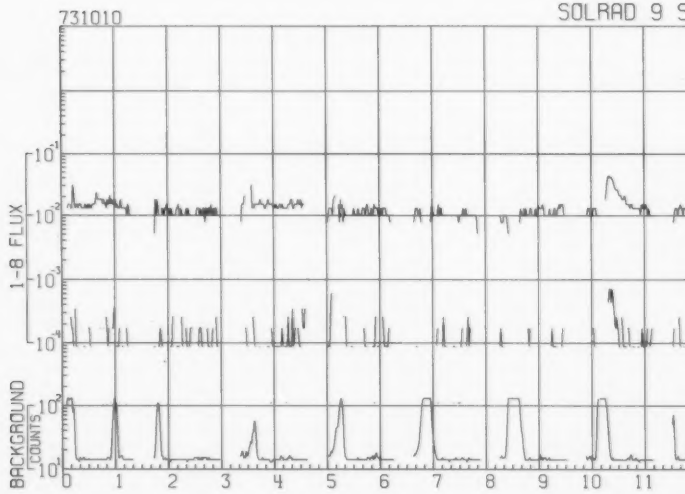
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1-8 FLUX
BACKGROUND
COUNTS
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28
Oct 73

9 STORED X-RAY DATA 731009

8-20 FLUX

0-3 FLUX

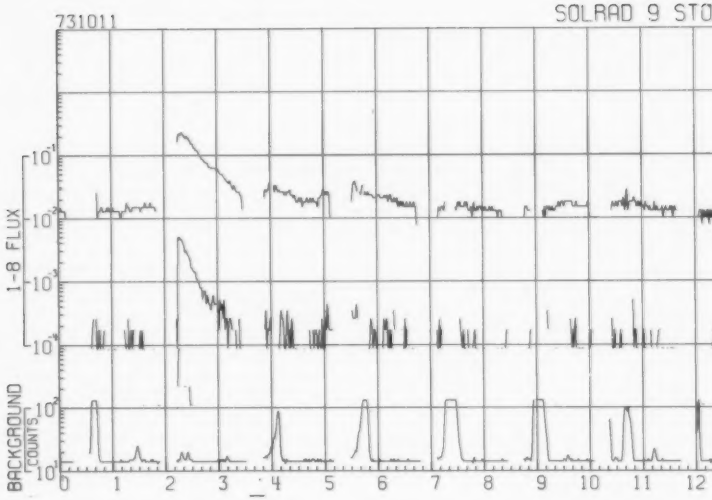
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA 731010

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24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1-8 FLUX
BACKGROUND
COUNTS
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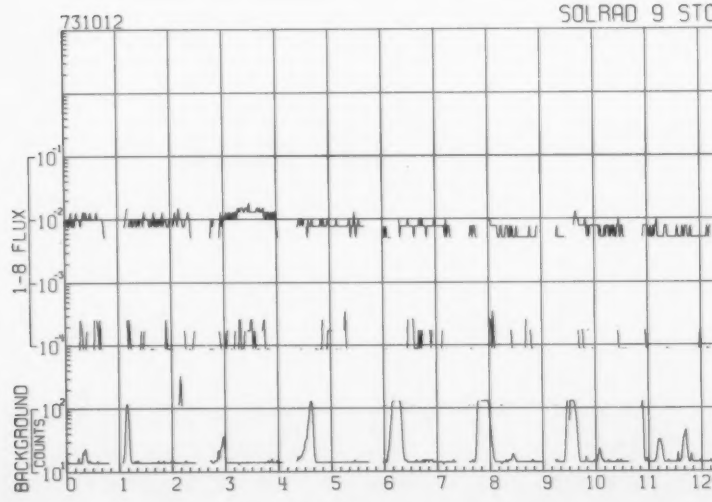
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1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11 12

STORED X-RAY DATA

731011

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

TORED X-RAY DATA

731012

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

13 14 15 16 17 18 19 20 21 22 23 24

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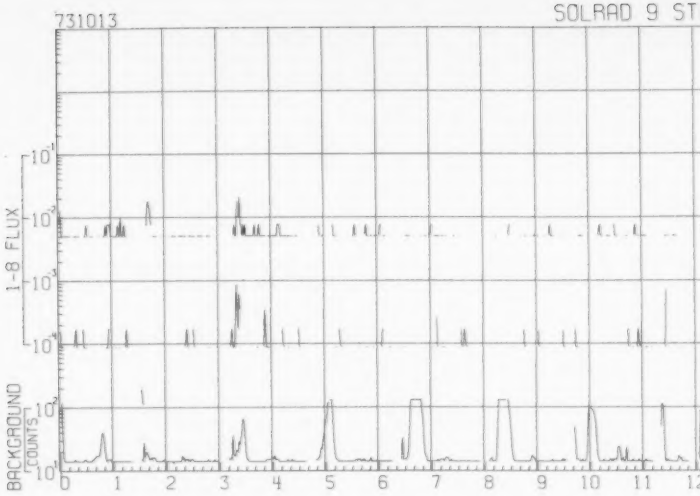
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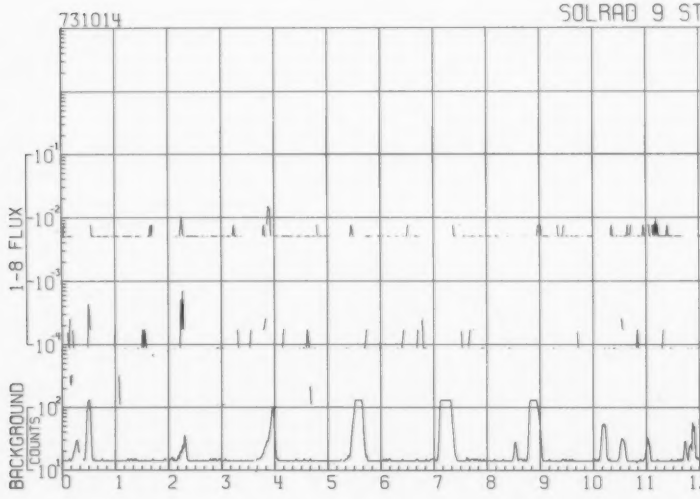
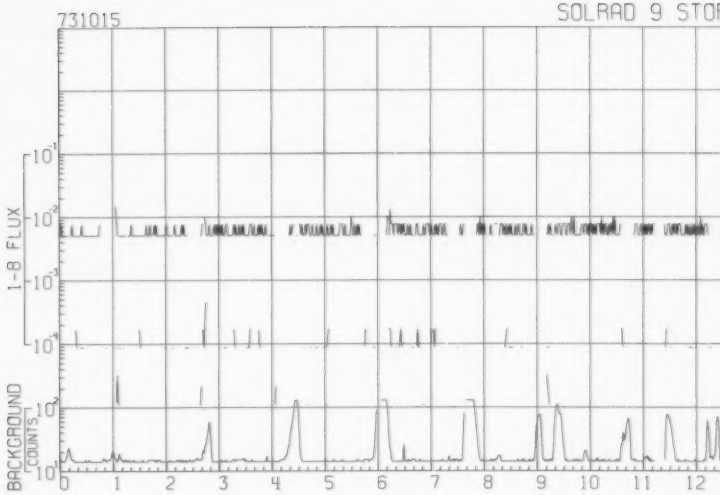

731014
SOLRAD 9 ST
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

30
Oct 73

STORED X-RAY DATA 731013

STORED X-RAY DATA 731014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1-8 FLUX
BACKGROUND
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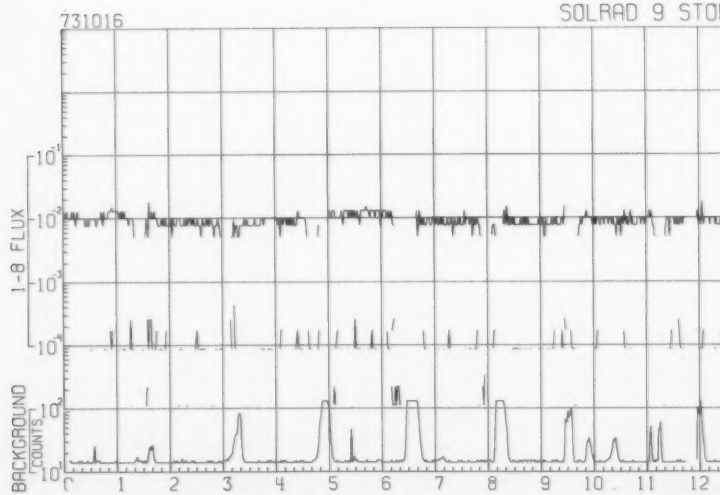
731016
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1-8 FLUX
BACKGROUND
COUNTS
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TORED X-RAY DATA

731015

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10^{-1}
10^{-2}
10^{-3}
8-20 FLUX
10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

TORED X-RAY DATA

731016

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX
10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

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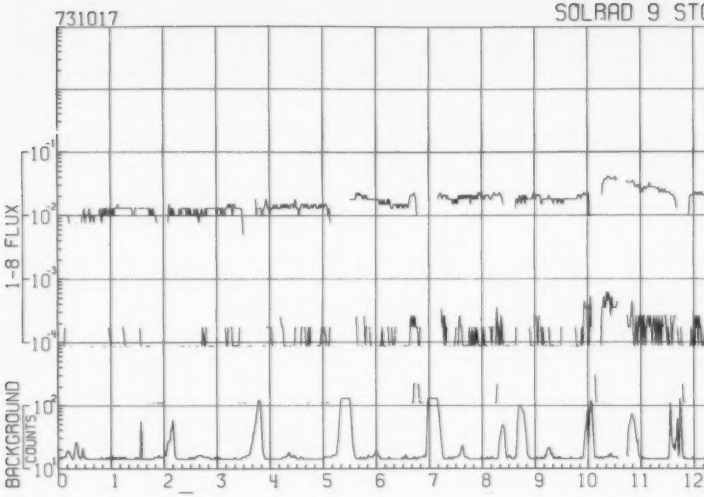
31
Oct 73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1-8 FLUX
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COUNTS
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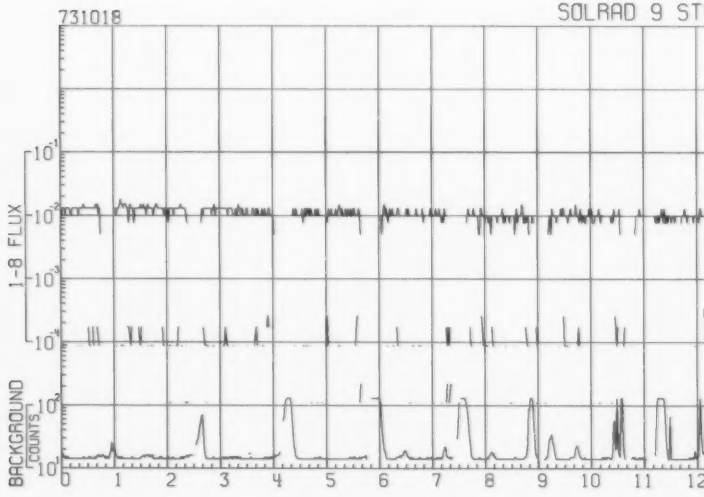
731018
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1-8 FLUX
BACKGROUND
COUNTS
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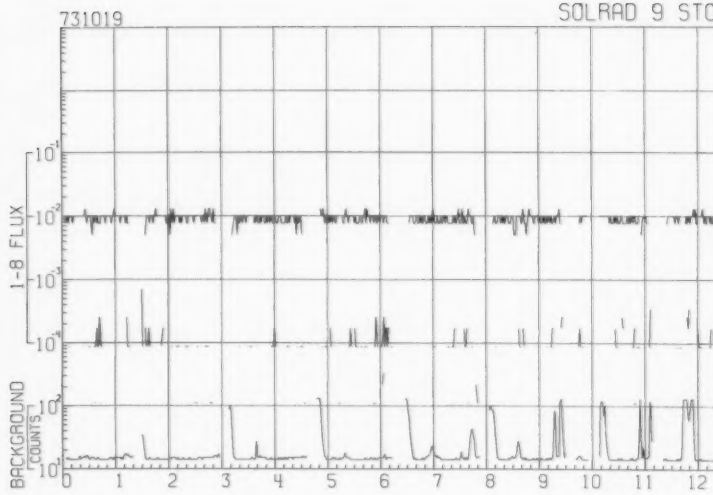
STORED X-RAY DATA 731017

STORED X-RAY DATA 731018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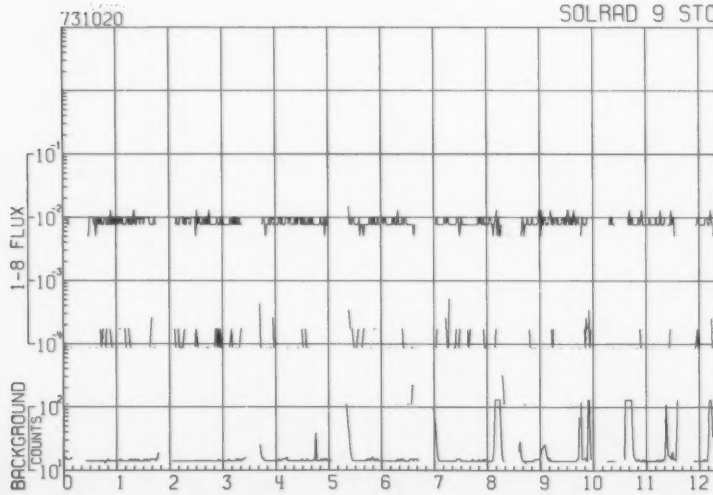
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1-8 FLUX
BACKGROUND
COUNTS
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STORED X-RAY DATA

731019

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

STORED X-RAY DATA

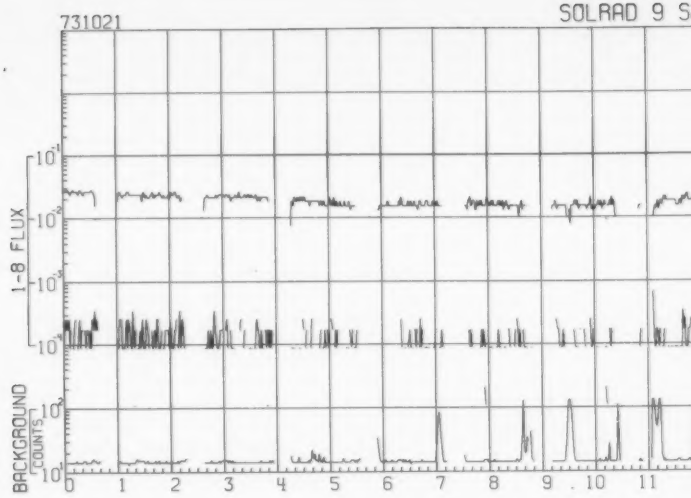
731020

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

33
Oct 73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1-8 FLUX
BACKGROUND
COUNTS
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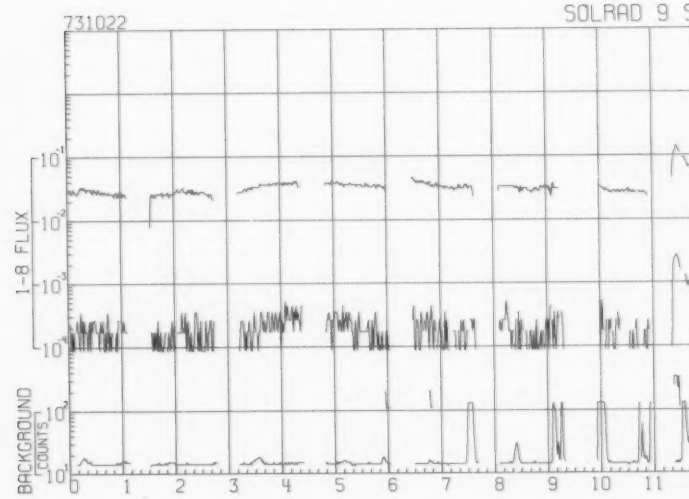
731022
SOLRAD 9 S
1-8 FLUX
BACKGROUND
COUNTS
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9 STORED X-RAY DATA

731021

10^{0}
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10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA

731022

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

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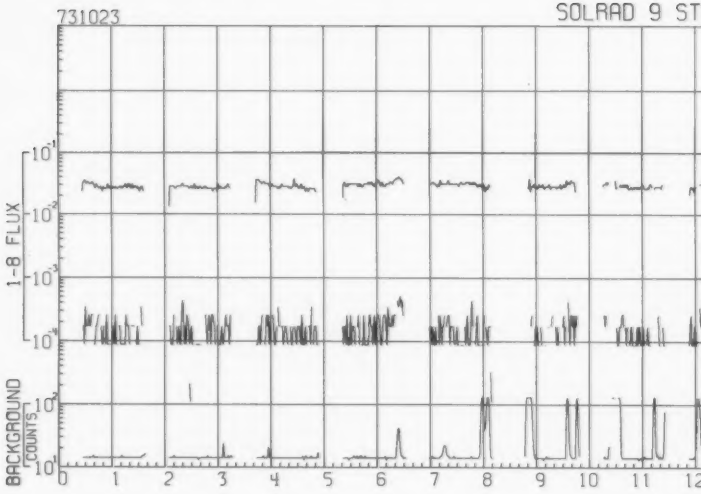
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1-8 FLUX
BACKGROUND
COUNTS
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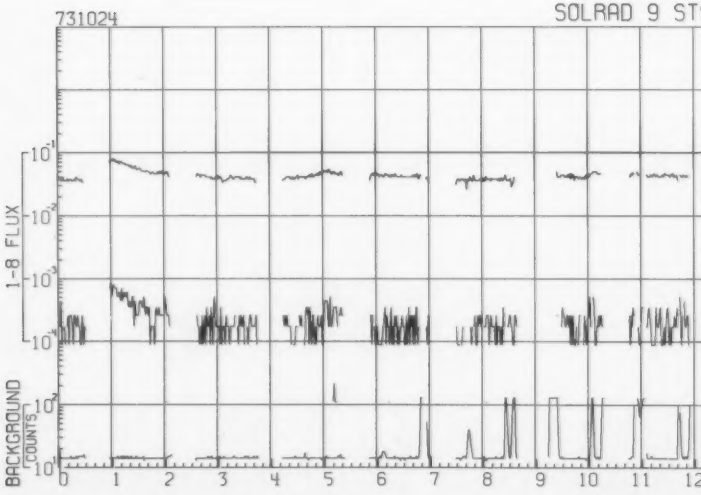
731024
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1-8 FLUX
BACKGROUND
COUNTS
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STORED X-RAY DATA 731023

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

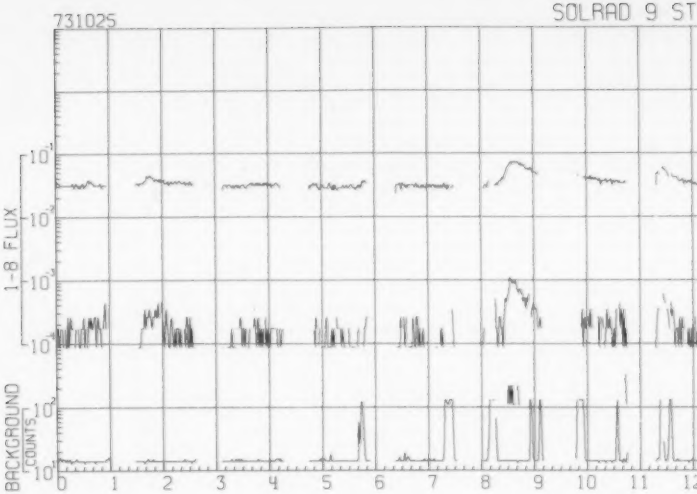
STORED X-RAY DATA 731024

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

35
Oct 73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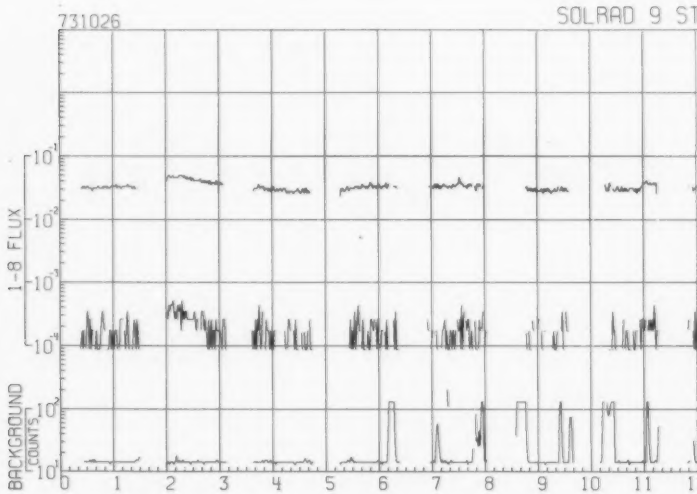
731026
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1-8 FLUX
BACKGROUND
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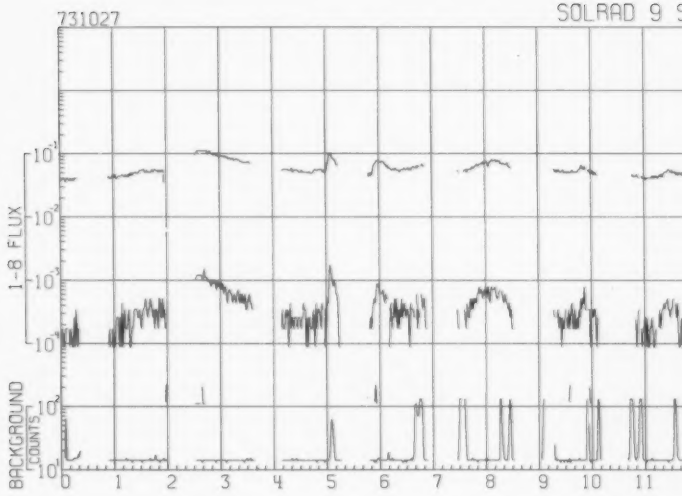
STORED X-RAY DATA 731025

STORED X-RAY DATA 731026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BACKGROUND
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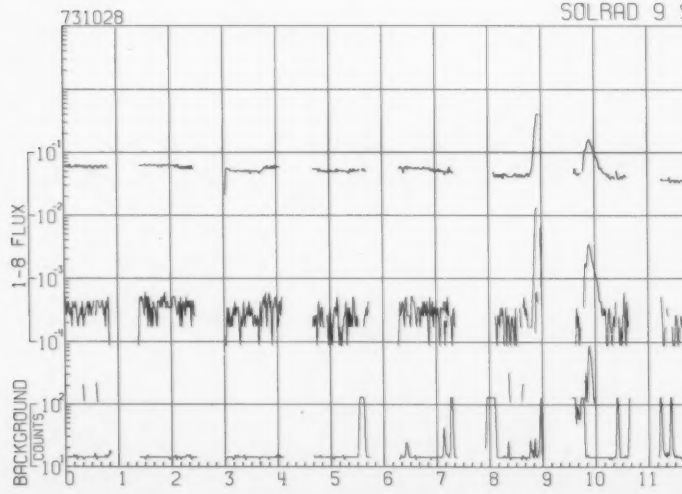
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1-8 FLUX
BACKGROUND
COUNTS
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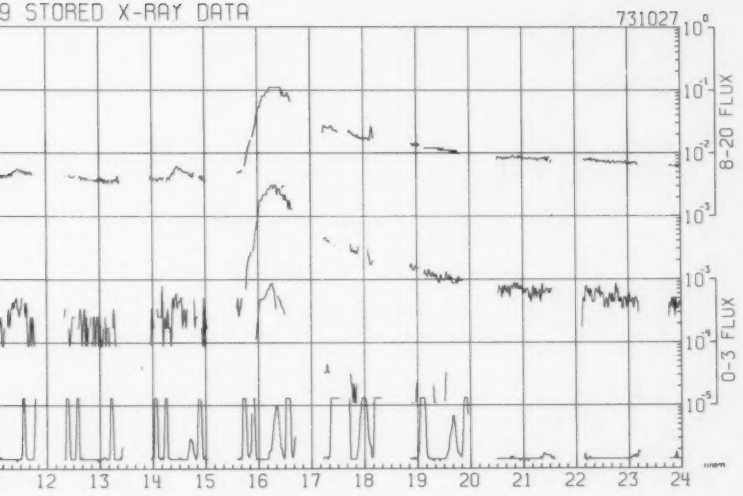
9 STORED X-RAY DATA
731027
8-20 FLUX
0-3 FLUX
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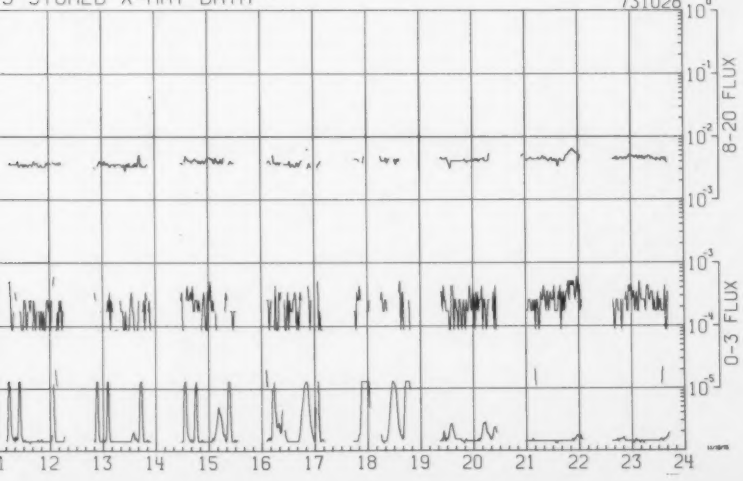
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8-20 FLUX
0-3 FLUX
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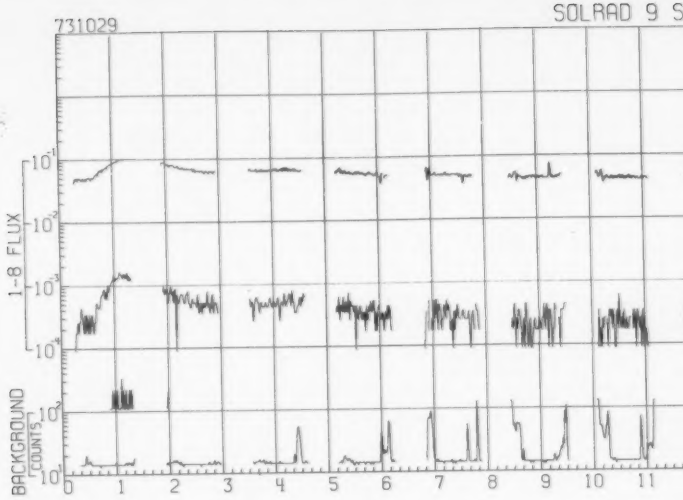
37
Oct 73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1-8 FLUX
BACKGROUND
[COUNTS]
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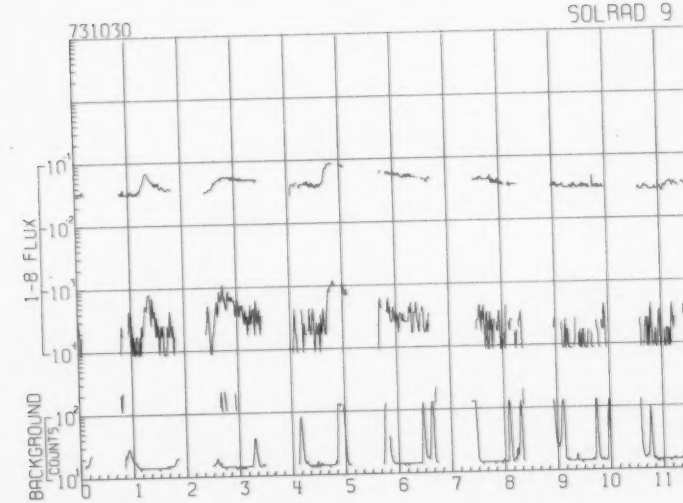
731030
SOLRAD 9
1-8 FLUX
BACKGROUND
[COUNTS]
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38
Oct 73

9 STORED X-RAY DATA 731029

8-20 FLUX

0-3 FLUX

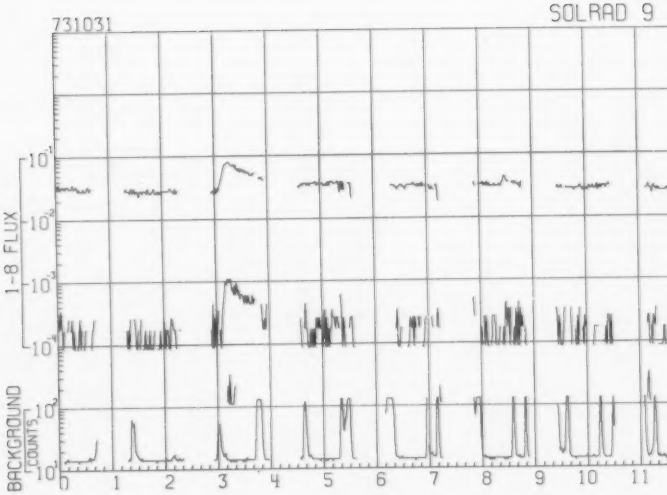
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA 731030

8-20 FLUX

0-3 FLUX

11 12 13 14 15 16 17 18 19 20 21 22 23 24


731031
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1-8 FLUX
BACKGROUND
COUNTS
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1
2
3
4
5
6
7
8
9
10
11

9 STORED X-RAY DATA

731031

10^{0}

10^{-1}

10^{-2}

10^{-3}

8-20 FLUX

10^{-3}

10^{-4}

10^{-5}

0-3 FLUX

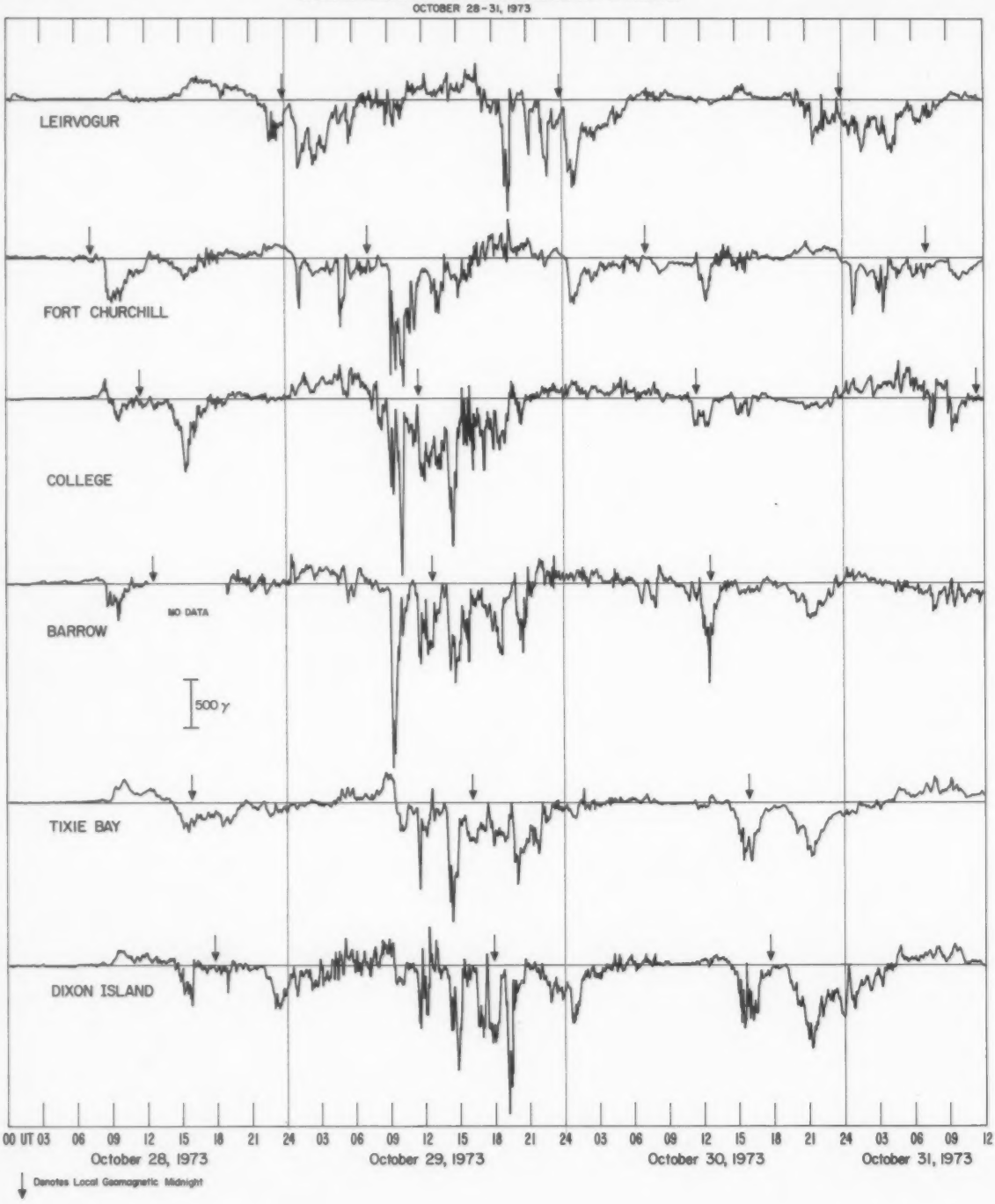
11 12 13 14 15 16 17 18 19 20 21 22 23 24

39

Oct 73

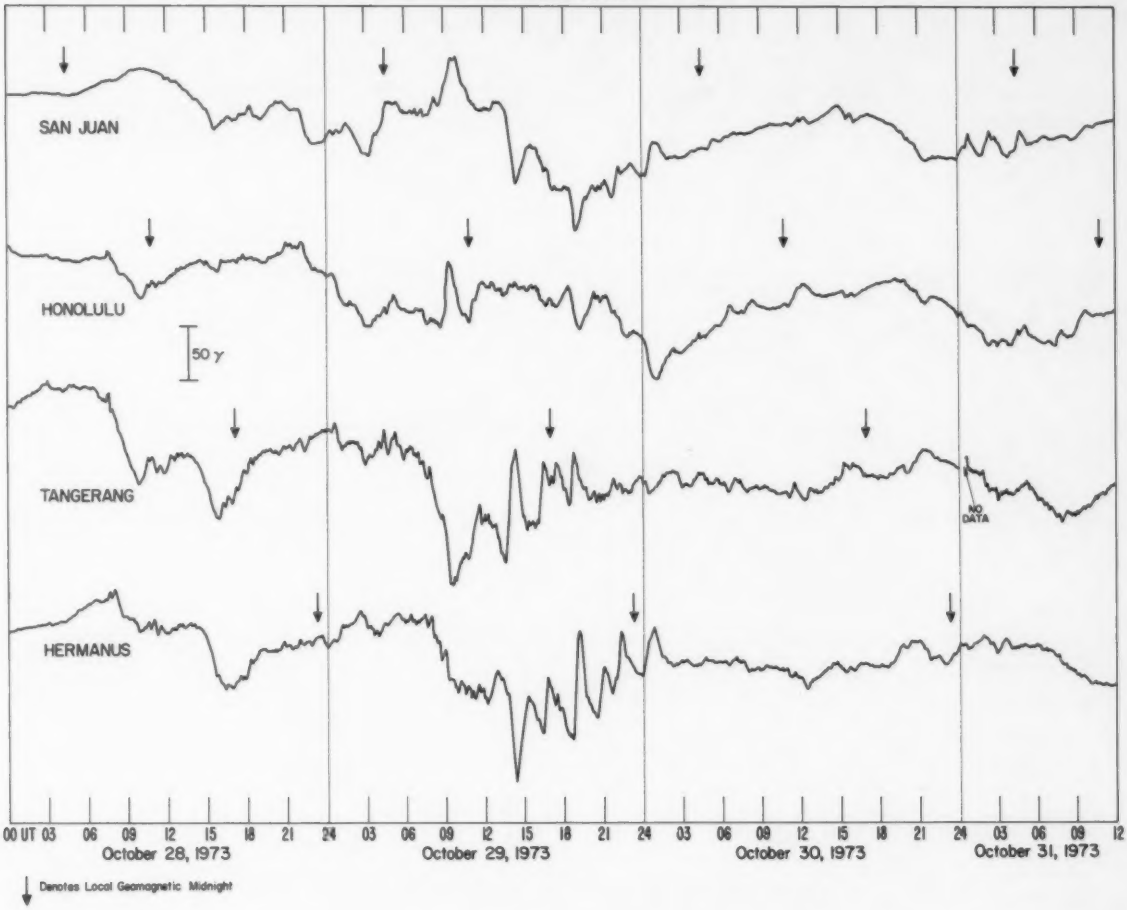
MAGNETOGRAMS OF GEOMAGNETIC STORMS

OCTOBER 28-31, 1973

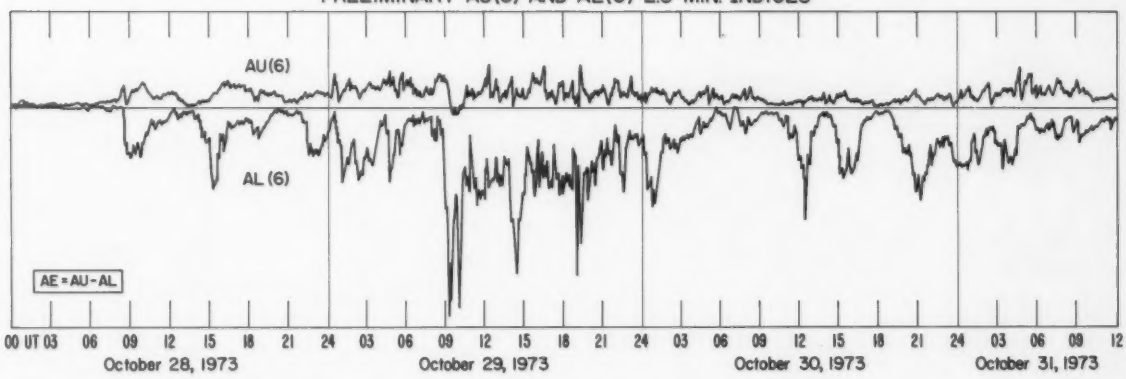

LEIRVOGUR
FORT CHURCHILL
COLLEGE
BARROW
NO DATA
500 γ
TIXIE BAY
DIXON ISLAND
00 UT 03 06 09 12 15 18 21 24 03 06 09 12 15 18 21 24 03 06 09 12 15 18 21 24 03 06 09 12
October 28, 1973
October 29, 1973
October 30, 1973
October 31, 1973
Denotes Local Geomagnetic Midnight

MAGNETOGRAMS OF GEOMAGNETIC STORMS

OCTOBER 28-31, 1973


SAN JUAN
HONOLULU
50 γ
TANGERANG
NO DATA
HERMANUS
00 UT 03 06 09 12 15 18 21 24 03 06 09 12 15 18 21 24 03 06 09 12 15 18 21 24 03 06 09 12
October 28, 1973
October 29, 1973
October 30, 1973
October 31, 1973
Denotes Local Geomagnetic Midnight

PRELIMINARY AU(6) AND AL(6) 2.5-MIN. INDICES



SEPTEMBER 1973 DATA

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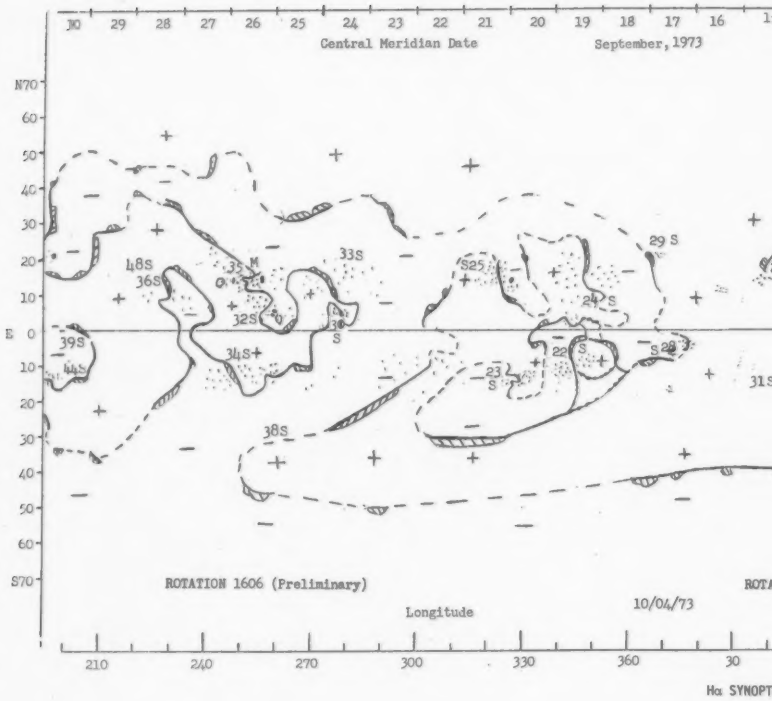
For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

ABBREVIATED CAL

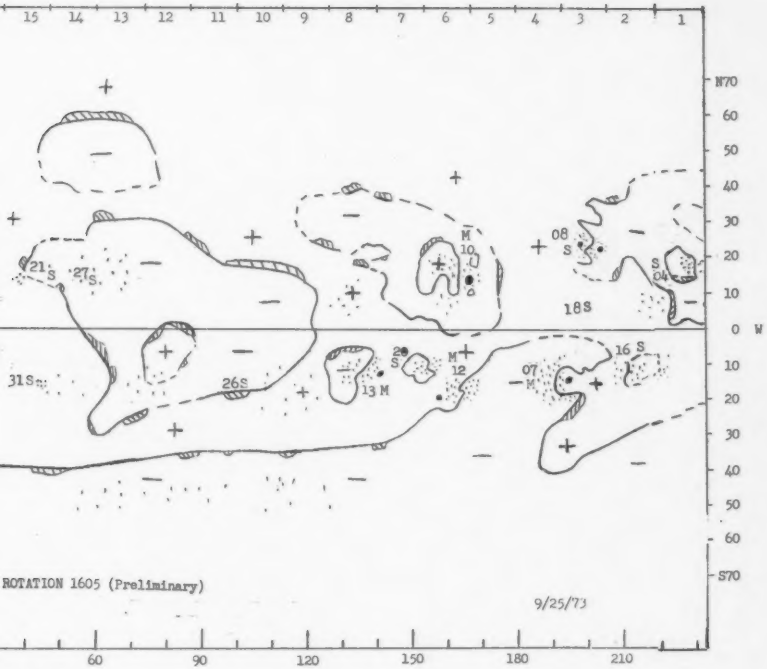
SEPTEMBE



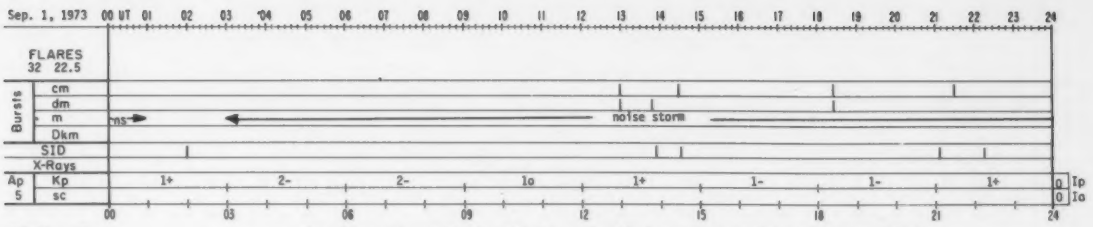
Hα SYNOPT

ALENDAR RECORD

MBER 1973

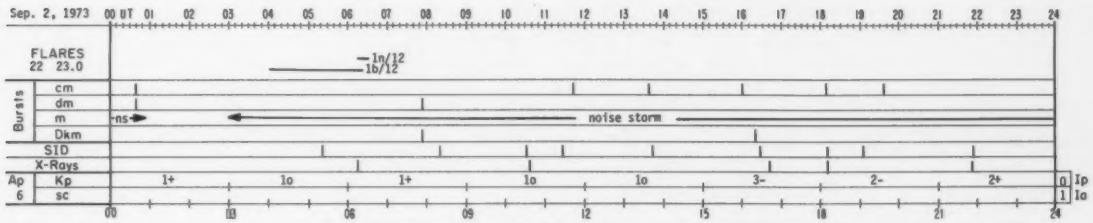


NOPTIC CHART



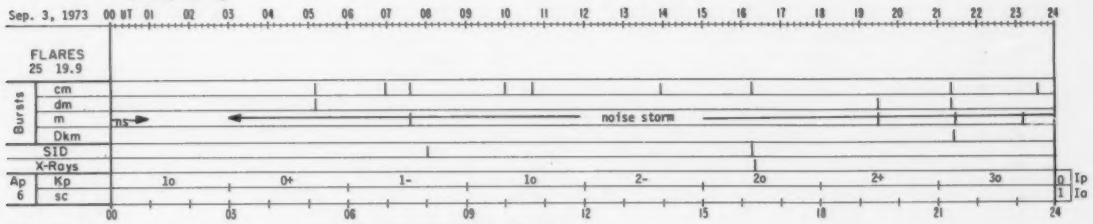
113 10 cm flux
89 Rz (Final)
CMP 12504 N12 (2) (19244) N14 (αf)1
(19245) N08 (α)1

One of ten most magnetically quiet days; moderately br. green corona 7 days earlier on NE limb.



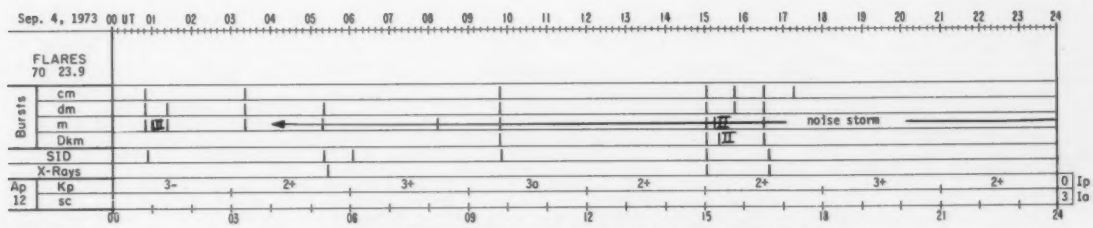
127 10 cm flux
124 Rz
CMP 12516 S07 (19252) S09 (βp)3
19253 S09 (β)1
(19256) S10 αp

One of ten most magnetically quiet days; moderately br. green corona 7 days earlier on NE limb, br. green corona 7 days later on W. limb.



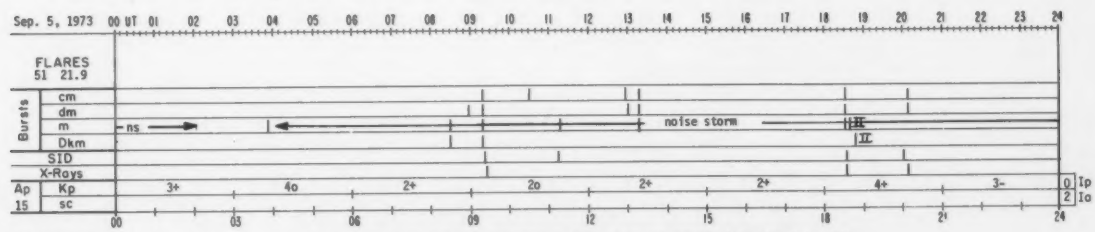
134 10 cm flux
130 Rz
CMP 12508 N24 19254 N22 (βp)5
(12518) N05

One of ten most magnetically quiet days.



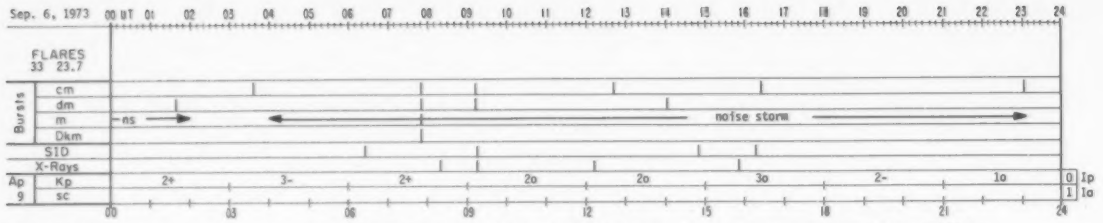
133 10 cm flux
121 Rz
CMP 12507 S15 (3) 19246 S15 (βp)5 CMP Sep. 3

Auroral glow seen between cloud over British Isles and eastern Atlantic at ϕ = 60° 2300-0300.



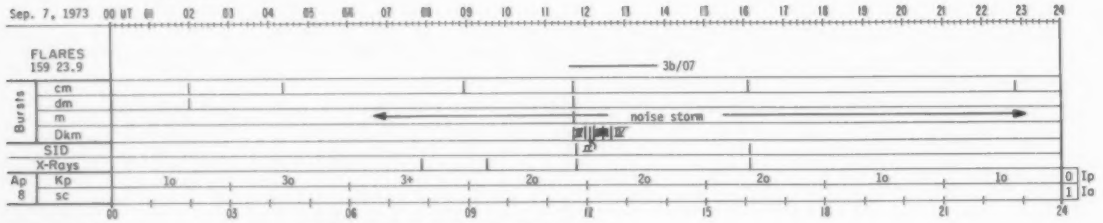
133 10 cm flux
108 Rz

Auroral glow seen between cloud over British Isles and eastern Atlantic at ϕ = 60° 0000-0300, homogeneous arc visible over western Atlantic at ϕ = 60° 0200, estimated overhead at ϕ = 65°-60°; br. green corona 7 days later on W. limb.



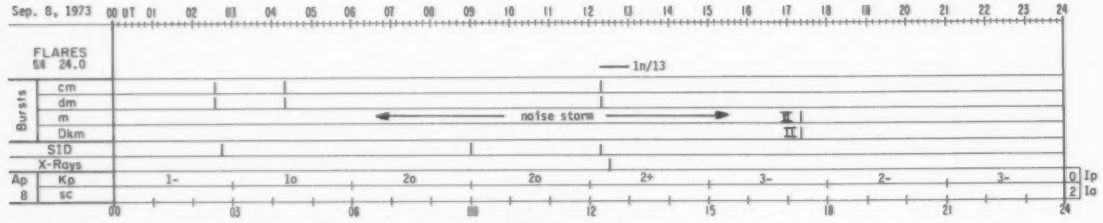
129 10 cm flux
84 Rz
CMP 12512 S16 19251 S18 (Bf)4
12510 N13 19249 N13 (Bp)6

Very br. green corona 7 days later on SW limb and moderately br. green corona 7 days later on NW limb.



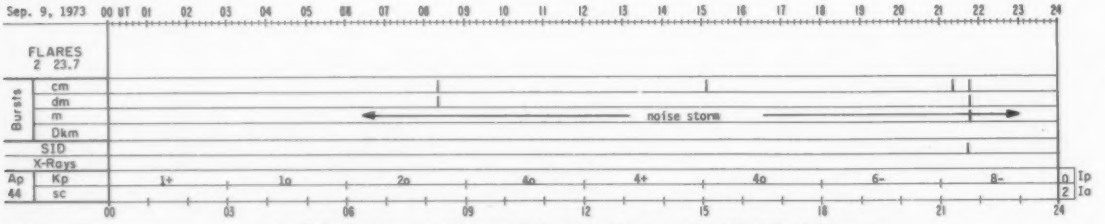
120 10 cm flux
77 Rz
CMP (12520) S12 (19257) S10 (ap)1
(12517) N00

Very br. green corona 7 days later on SW limb.



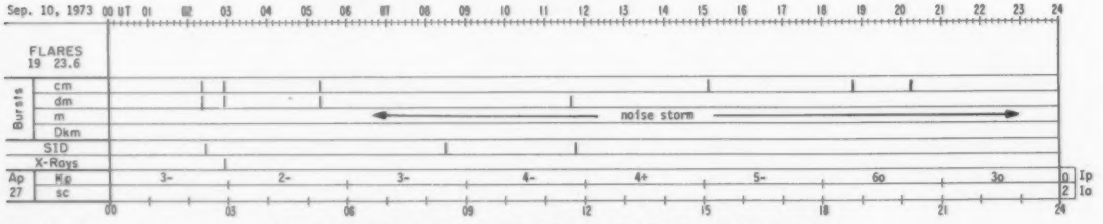
114 10 cm flux
72 Rz
CMP 12513 S13 19255 S12 (B)4

Moderately br. green corona 7 days later on SW limb.



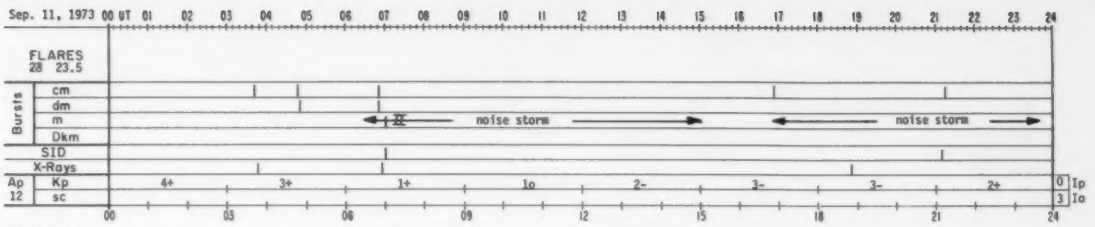
112 10 cm flux
75 Rz

One of five most magnetically disturbed days with moderate activity 1200-1800 and moderate-to-moderately severe storm after 1800; aurora overhead over USSR at ϕ = 56° 1800-1900 and ϕ = 59° 2100 and 2300-2400, auroral activity visible in southern Norway at ϕ = 59° 2120-2345 with rays to zenith 2120 and 2345, showing red coloration, activity seen from British Isles 2050-2400, maximum at 2250 with rays visible to 58° and rayed arc estimated overhead at ϕ = 64° (cloud prevented more extensive observation); moderately br. green corona 7 days earlier on SE limb.



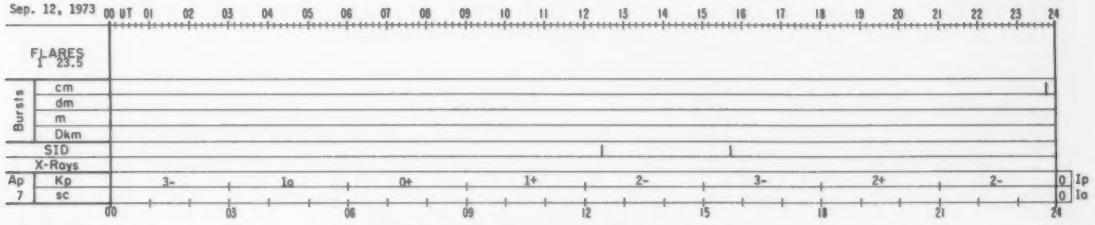
105 10 cm flux
58 Rz

One of five most magnetically disturbed days with moderate-to-moderately severe storm 1200-2100; aurora overhead over USSR at ϕ = 58° 1800-1900 and 2000; no coronal data 7 days later on W. limb.



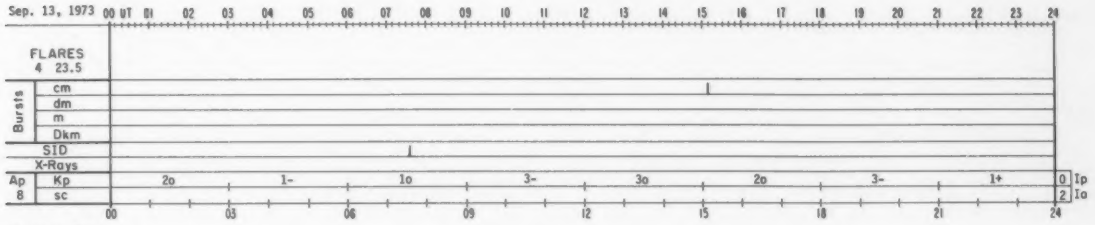
96 10 cm flux
42 Rz
CMP (12526) S18

S17 No obs. Mt. Wilson
S10 No obs. Mt. Wilson

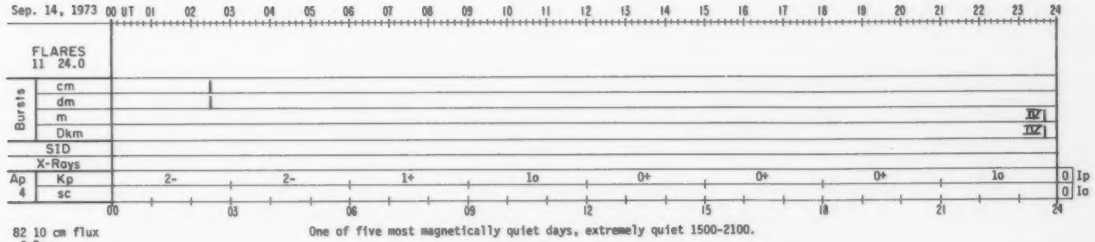


88 10 cm flux
22 Rz

One of ten most magnetically quiet days; no coronal data
7 days later on W. limb 250°-360°.

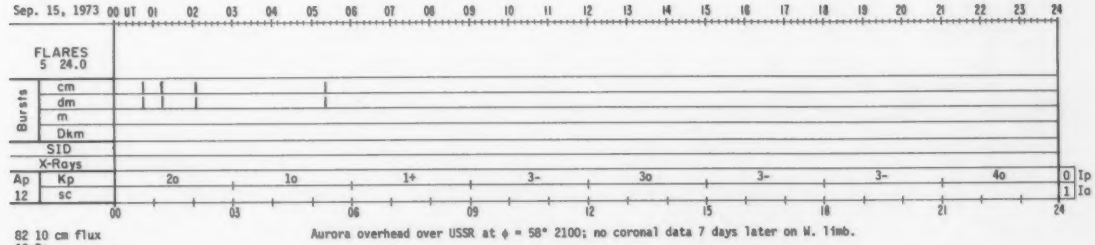


84 10 cm flux
0 Rz



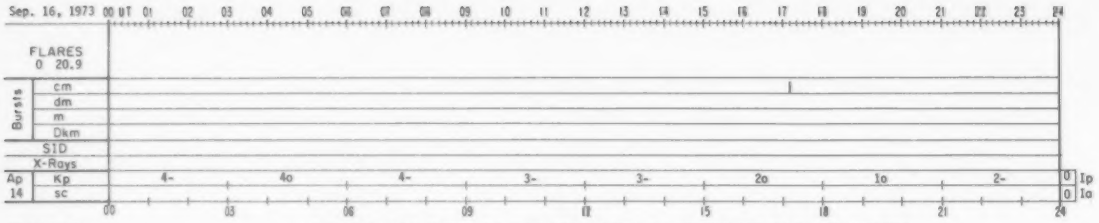
82 10 cm flux
0 Rz
CMP (12527) N13

One of five most magnetically quiet days, extremely quiet 1500-2100.



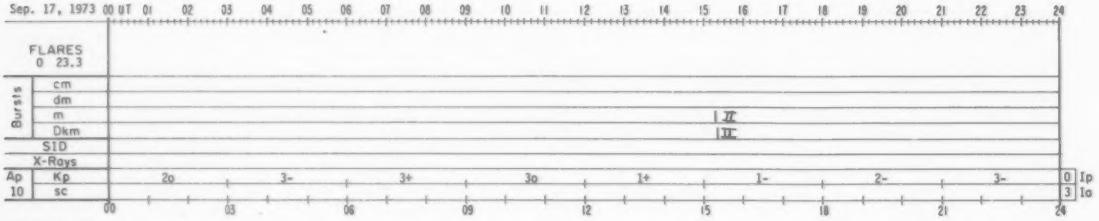
82 10 cm flux
13 Rz
CMP (12531) S16
(12521) N15

Aurora overhead over USSR at ϕ = 58° 2100; no coronal data 7 days later on W. limb.

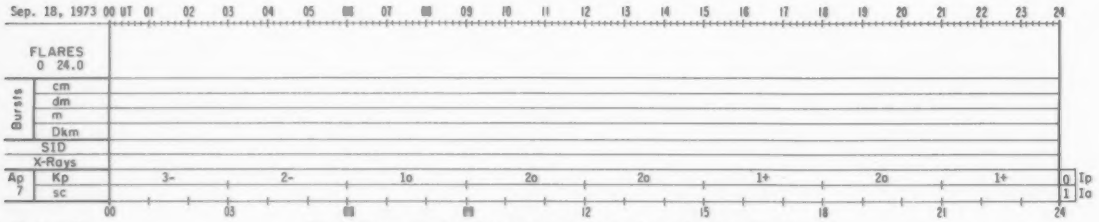


80 10 cm flux
26 Rz

Aurora overhead over USSR at ϕ = 54° 1400 and 1500, ϕ = 56° 1700-1800 and ϕ = 60° 1800-1900.

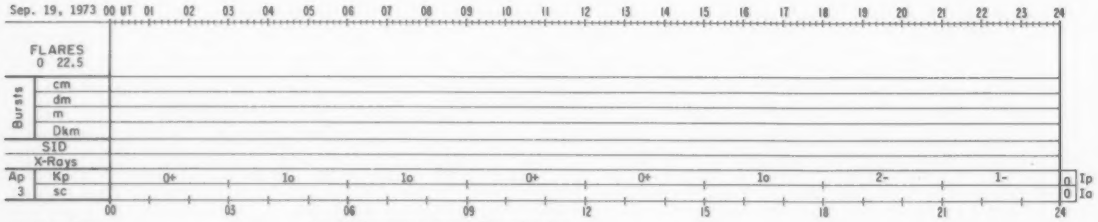


81 10 cm flux
20 Rz
CMP 12528 S04 (19260) S05 (αp)2
(12529) N22



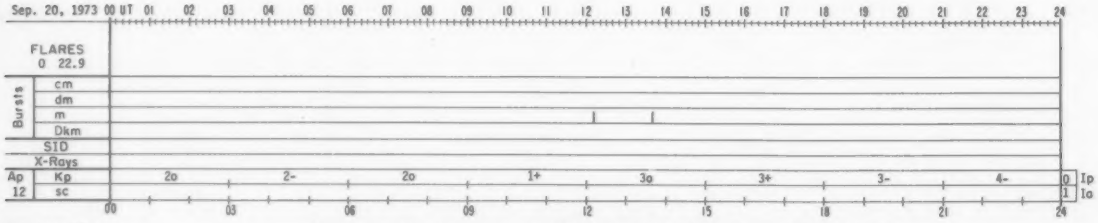
84 10 cm flux
16 Rz

One of ten most magnetically quiet days; no coronal data 7 days later on W. limb.



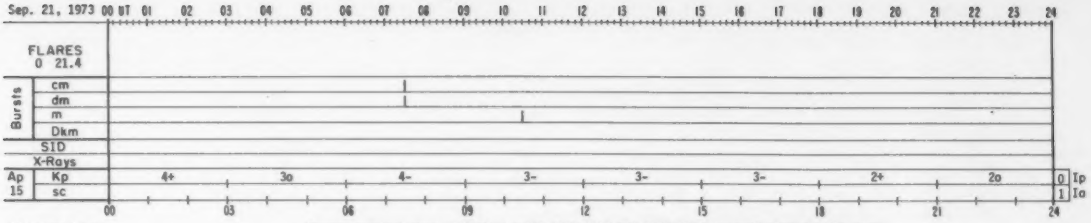
86 10 cm flux
8 Rz
CMP 12524 N15 (2)
12522 S08 (19259) S10 (α)1

One of five most magnetically quiet days.



91 10 cm flux
30 Rz

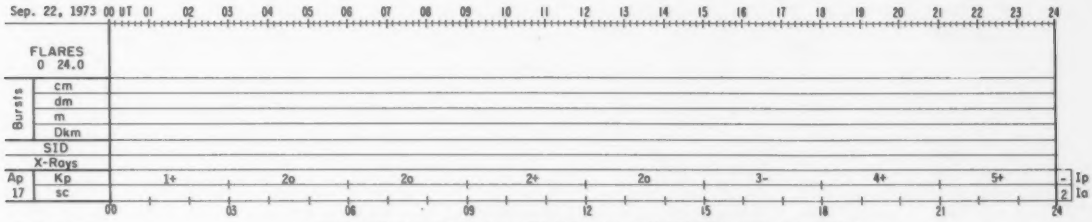
Aurora overhead over USSR at ϕ = 58° 1800, 2000, 2100 and 2300, auroral glow visible over British Isles at ϕ = 58° 2000-0050 with rays visible at 60° 2150; very br. green corona 7 days earlier on E. limb.



94 10 cm flux
39 Rz
CMP 12523 S14
CP 12525 N16

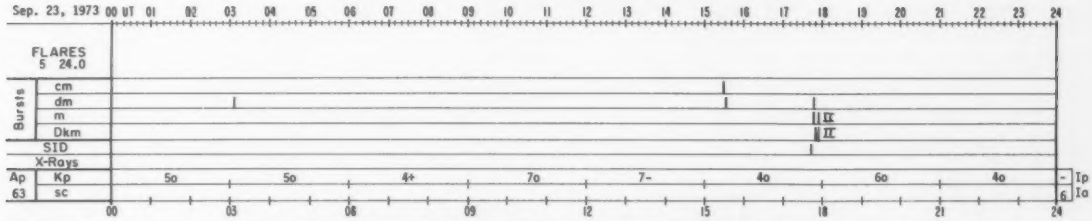
19258 N14 (βp 4

Aurora overhead over USSR at ϕ = 59° 1100-1300 and 2000-2300, auroral glow visible over British Isles at ϕ = 58° 0000-0050; very br. green corona 7 days earlier on NE limb, br. green corona 7 days earlier on SE limb, no coronal data 7 days later on W. limb.



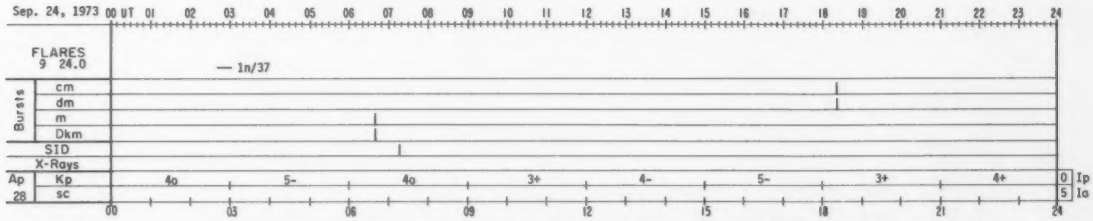
99 10 cm flux
48 Rz

Aurora overhead over USSR at ϕ = 58° 1900 and ϕ = 59° 2300-2400, auroral glow visible over British Isles at ϕ = 60° 2150-0400 and at ϕ = 58° 2300-0045, rays visible 2245 and homogeneous arc visible at 2350 with base overhead at ϕ = 66°-67°.



103 10 cm flux
58 Rz

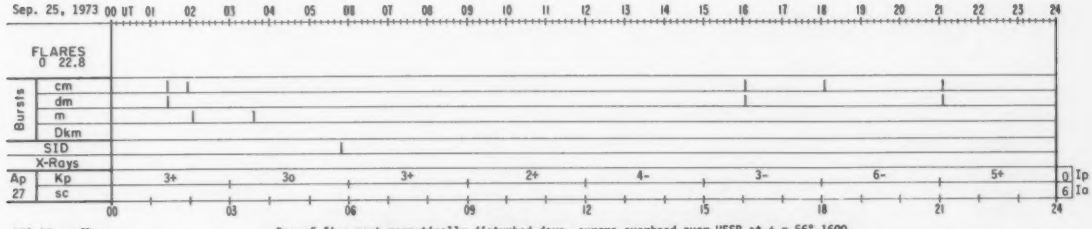
One of five most magnetically disturbed days, with moderate-to-moderately severe storm all day; aurora overhead over USSR at ϕ = 59° 0000, ϕ = 52° 1200 and ϕ = 58° 1300-1400 and 1500-1700, auroral glow visible over British Isles at ϕ = 60° 0000-0400 and at ϕ = 58° 0000-0045, rayed band over eastern Atlantic with base overhead at ϕ = 65°-66° 0001-0150, auroral glow seen at ϕ = 60° 2110-0300 with rays over British Isles at 2150; no coronal data 7 days later on W. limb.



106 10 cm flux
63 Rz
CMP 12530 N04 (2)
12533 N16 (5)

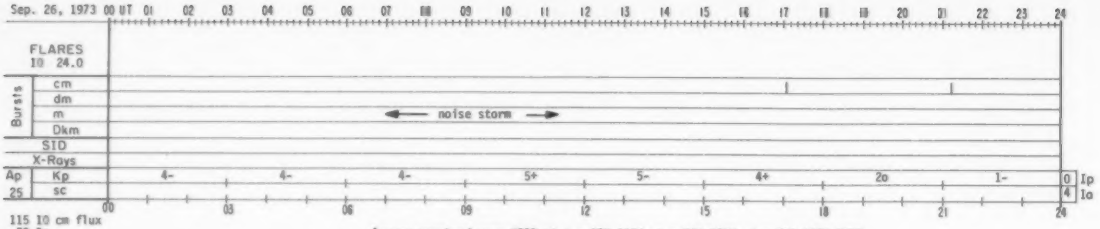
19262 N05 (βp)2

One of five most magnetically disturbed days with slight-to-moderate activity all day; aurora overhead over USSR at ϕ = 57° 1200-1400, ϕ = 58° 1100 and 1500-1800 and ϕ = 59° 2000-2300, auroral glow seen over British Isles at ϕ = 60° 0000-0300, auroral glow visible over British Isles at ϕ = 60° 2150, but conditions generally cloudy; no coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on NW limb.



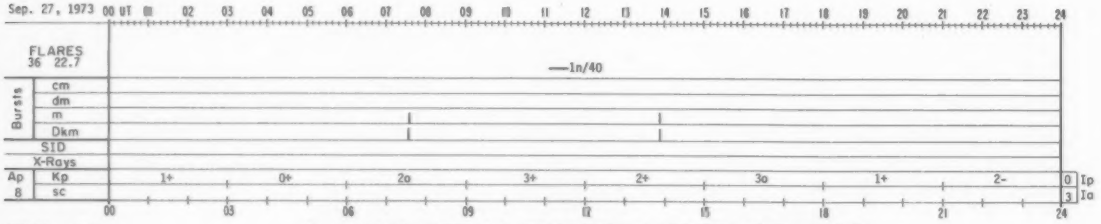
112 10 cm flux
74 Rz

One of five most magnetically disturbed days, aurora overhead over USSR at ϕ = 56° 1600, ϕ = 58° 1400-1600 and ϕ = 57° 1700-2100, auroral glow visible over western Atlantic with rays visible to ϕ = 58° 0147; moderately br. green corona 7 days earlier on NE limb, no coronal data 7 days later on W. limb.



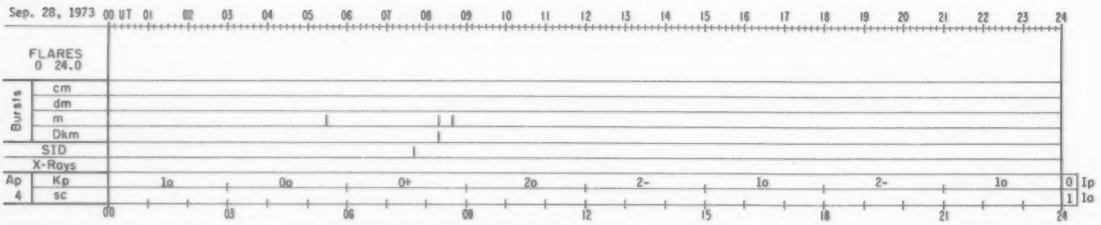
115 10 cm flux
78 Rz
CMP 12538 S29
12532 N07 (2)
12534 S14 (2)
12535 N14 (3)
19266 S30
19261 N06 (ap)4
19264 N08 βf
19263 N14 (βf)5
CMP Sep. 25

Aurora overhead over USSR at ϕ = 57° 1100, ϕ = 54° 1200, ϕ = 53° 1300-1500 and ϕ = 59° 1900-2100; no coronal data 7 days later on W. limb.



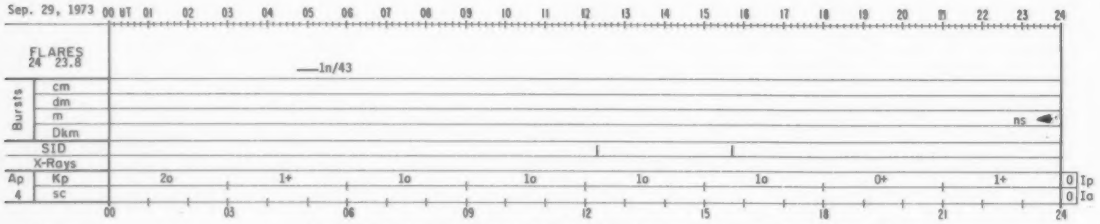
115 10 cm flux
78 Rz

Aurora overhead over USSR at ϕ = 58° 1100-1300 and ϕ = 54° 1400 and 1500, auroral glow visible over British Isles at ϕ = 59° 0050-0300, identifiable as homogeneous arc (with base overhead at ϕ = 64°-65°) at ϕ = 60° 0150-0300; moderately br. green corona 7 days earlier on NE limb, no coronal data 7 days later on W. limb.



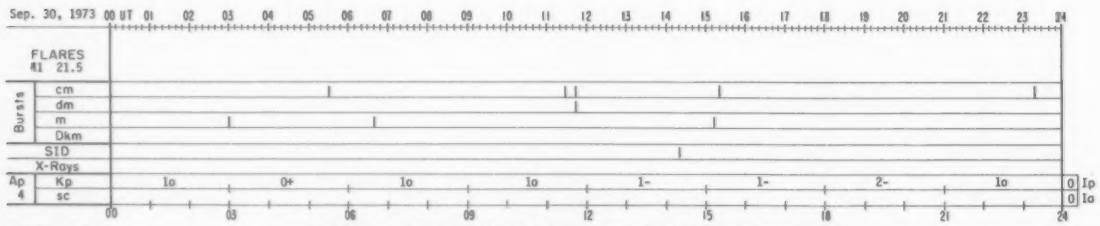
118 10 cm flux
80 Rz
CMP 12536 N10 (3)

One of five most magnetically quiet days.



116 10 cm flux
75 Rz
CMP (12548) N18

One of five most magnetically quiet days; moderately br. green corona 7 days later on SW limb.



116 10 cm flux
71 Rz
CMP (12539) S02
12544 S11

One of five most magnetically quiet days; no coronal data 7 days later on W. limb.

REGIONAL FLARE INDEX

SEPTEMBER 1973

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
12504	N13	73/09/01.5	73/09/01	73/09/01	7.52	7.52	2
12508	N24	73/09/03.5	73/09/03	73/09/09	18.52	2.65	3
12507	S14	73/09/04.0	73/08/30	73/09/10	249.75	20.81	15
12510	N15	73/09/06.4	73/08/31	73/09/06	87.64	12.52	12
12512	S16	73/09/06.4	73/09/01	73/09/10	39.22	3.92	13
12520	S11	73/09/07.3	73/09/10	73/09/12	36.06	12.02	4
12513	S13	73/09/08.2	73/09/04	73/09/14	74.85	6.80	9
12522	S 8	73/09/19.7	73/09/15	73/09/15	5.07	5.07	1
12530	N 5	73/09/24.5	73/09/24	73/09/26	10.55	3.52	2
12532	N 7	73/09/26.2	73/10/01	73/10/01	5.96	5.96	1
12534	S14	73/09/26.7	73/09/23	73/09/23	5.38	5.38	1
12535	N14	73/09/26.8	73/09/26	73/10/03	46.22	5.78	7
12537	N22	73/09/30.9	73/09/24	73/09/24	3.21	3.21	1

Note:
The Regional Flare Index and count of flares in each region has in previous months included each maximum of a multi-maximum event. This has caused some regions to appear to be more flare producing than is probably warranted. Beginning with April 1972 only the principal maximum of a multi-maximum event will be used in the calculation. Also note that only the Confirmed Events as selected for the "I.A.U. Quarterly Bulletin on Solar Activity" are included in the calculation.

Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no confirmed flares during its disk passage.

MISCELLANEOUS DATA

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Daily Solar Activity Centers
8.6 mm Spectroheliograms -- January 1974 56-58

For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)

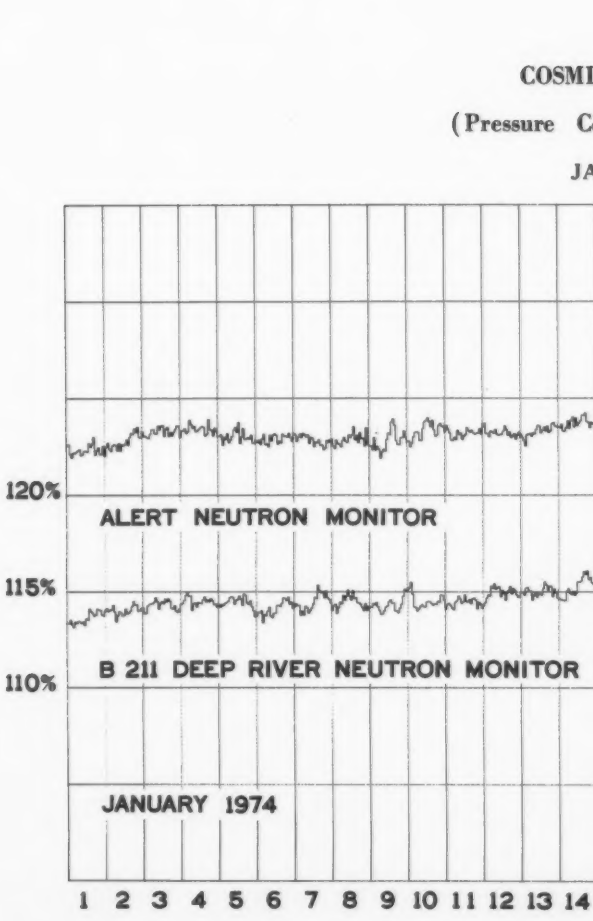
JANUARY 1974

DATE	ALERT	DEEP RIVER
1	7501.3	6989.6
2	7528.9	7014.5
3	7565.9	7032.0
4	7572.8	7044.3
5	7548.3	7041.7
6	7539.4	7020.8
7	7536.8	7041.5
8	7537.7	7041.0
9	7532.9	7032.5
10	7566.8	7045.6
11	7559.3	7040.8
12	7561.8	7072.5
13	7566.0	7076.8
14	7594.6	7090.4
15	7595.0	7084.8
16	7601.9	7061.3
17	7559.3	7026.1
18	7544.5	7010.2
19	7551.5	6998.5
20	7546.6 (21)	6996.8
21	7573.3 (23)	6998.0
22	7598.3	7034.2
23	7610.8	7040.3
24	7644.1	7073.5
25	7621.3	7050.2
26	7565.0	6975.1
27	7532.4	6977.8
28	7503.6	6970.2
29	7508.6	6993.2
30	7524.3 (20)	7017.7
31	0.0	7045.1

COSMI

(Pressure C

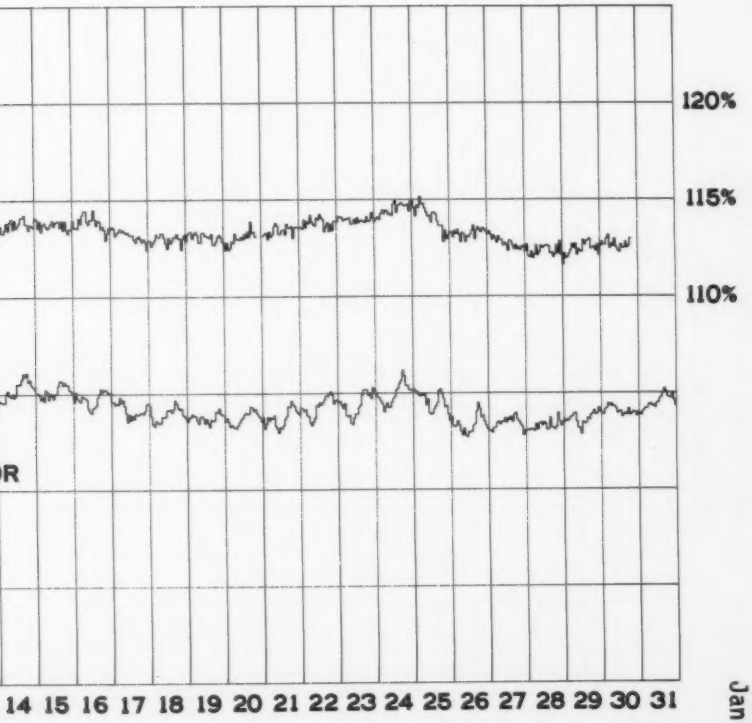
JA



MIC RAY INDICES

Corrected Hourly Totals)

JANUARY 1974

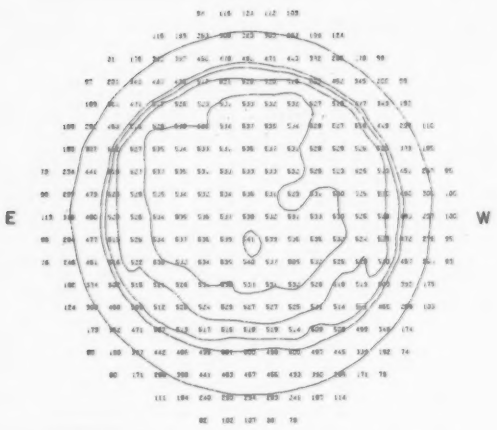


55
Misc
Jan 74

8.6 mm SPECT

JAN

Prospect Hill



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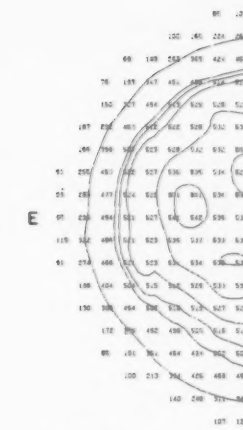
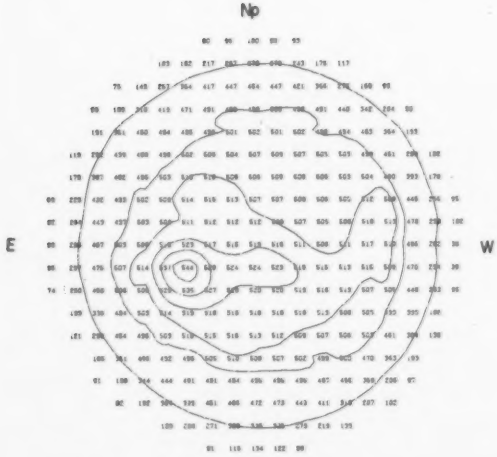
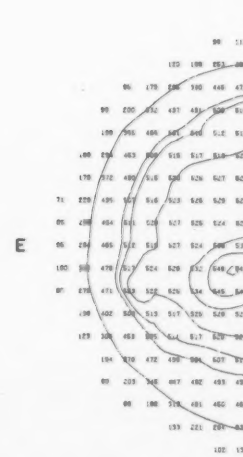


7/1453 UT



12/1616 UT

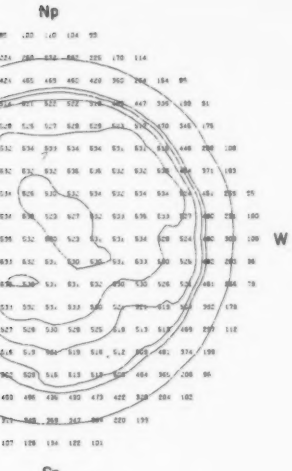


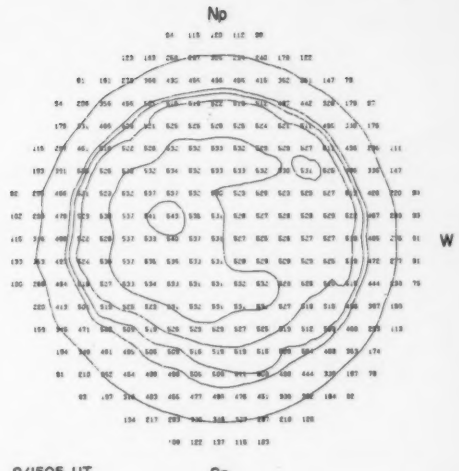
13/1623 UT

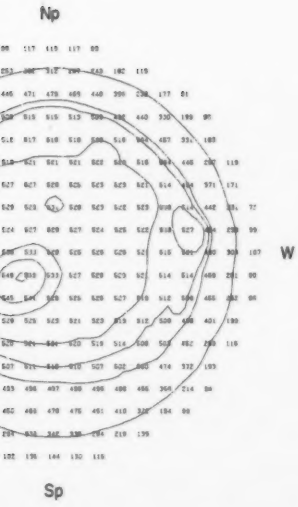
CTROHELIOGRAMS

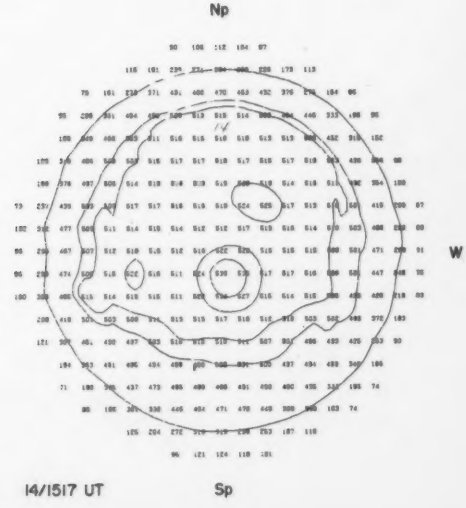
JANUARY 1974

56
Misc
Jan 74





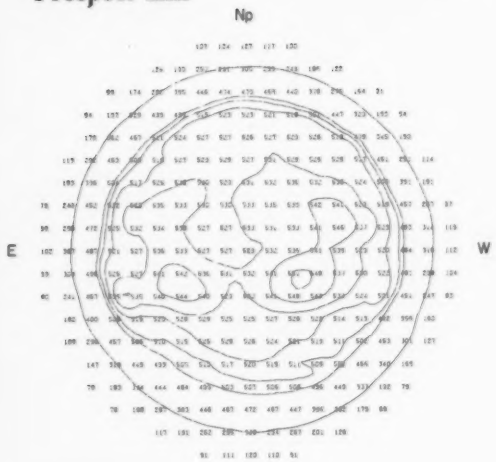




8.6 mm SPECTROHE

JANUARY 197

Prospect Hill



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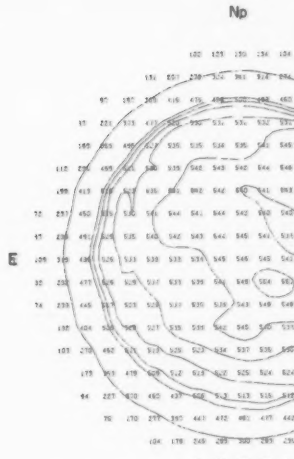
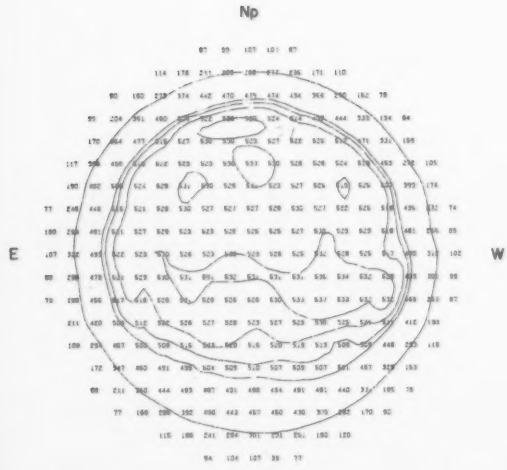
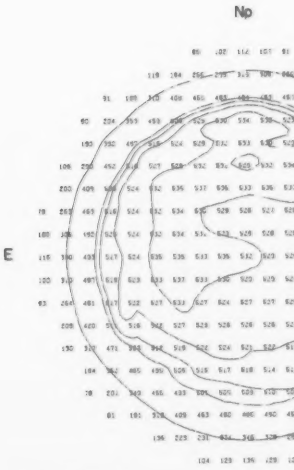


22/1529 UT Sp



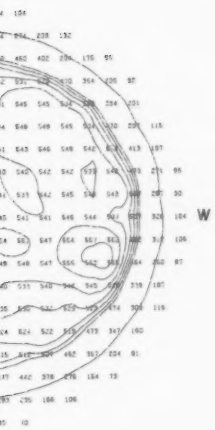
24/1603 UT

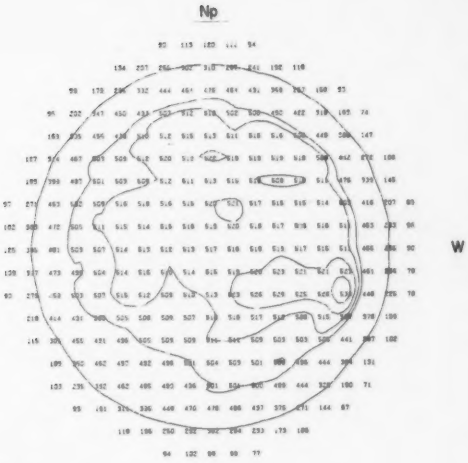


25/1450 UT Sp

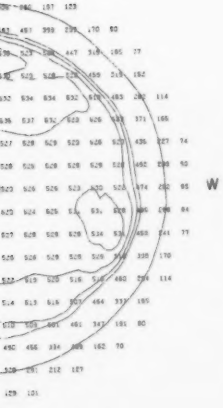
HELIOGRAMS

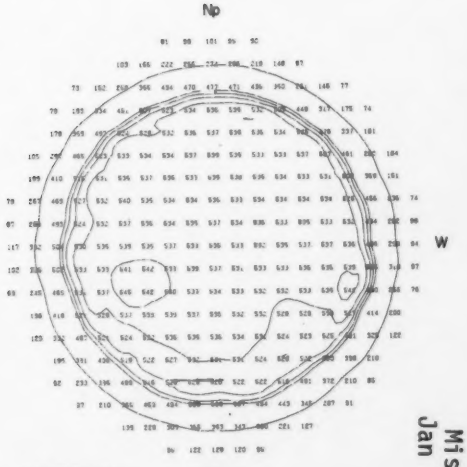
1974





23/1431 UT





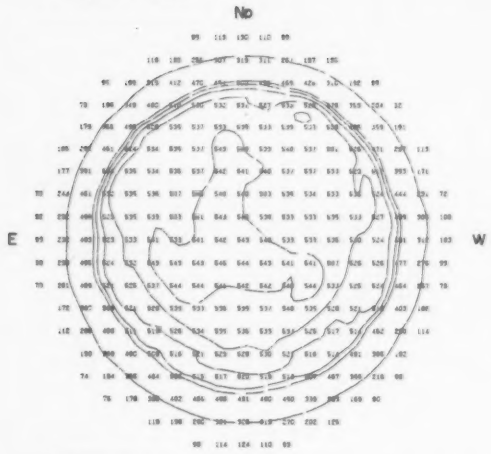
26/1539 UT

57
Misc
Jan 74

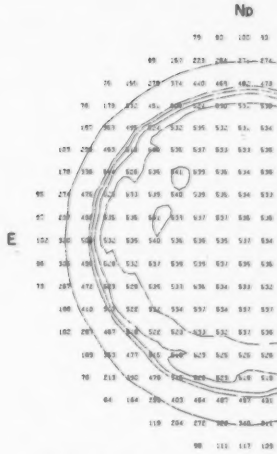
8.6 mm SPECTROH

JANUARY

Prospect Hill



28/1557 UT



30/1604 UT

OHELIOGRAMS

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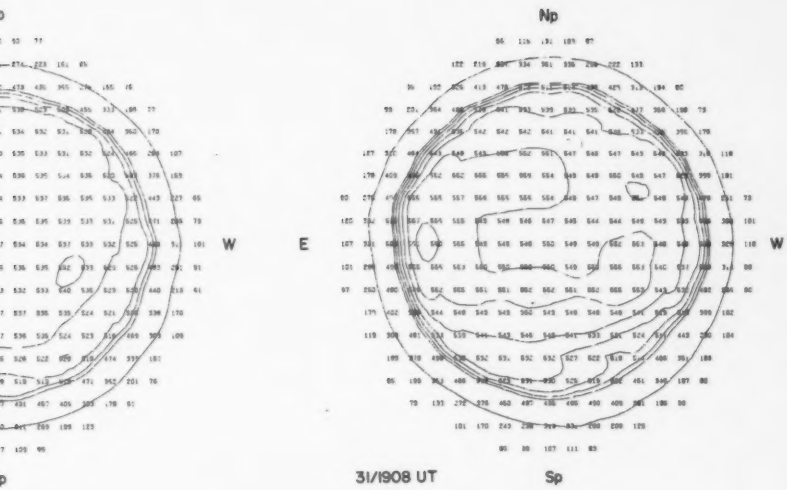

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